REQUESTS FOR INFORMATION

The following inquiries have been received by Electric Refrigeration News. Readers who can supply information on these subjects are invited to write at once, referring to the Query number.

Multiple Coils Operating at Different Temperatures

Query No. 90—A distributor in northern Ohio requests information regarding multiple installations of refrigeration coils in units requiring different temperature, but running off of the main compressor unit. The inquirer says "We desire this information on equipment employing sulphur dioxide as a refrigerant and for direct expansion and flooded systems."

French Company Wants Agency

Query No. 91—An electrical company in Bordeaux, France, writes as follows:

"Owing your address to the American Consulate from Bordeaux, I take the liberty to write you desiring to find for France the representation of an American refrigerator manufacturer.

"I represent in France an important manufacturer of electric ovens and refrigerators would interest me as being sold to the same customers.

"I should like to find a manufacturer making the same genre as the Frigidaire (General Motors Co.) References to disposition."

Who Makes Water Coils for Domestic Refrigerators?

Query No. 92—A manufacturer of electric refrigerators requests information as to where water coils for installation in domestic refrigerators may be purchased.

Cash Acme Water Valve

Query No. 93—A sales engineering company in Virginia requests information as to the manufacturer of an automatic water valve whose product is marked "Cash Acme."

Are There Any Books On Commercial Applications?

Query No. 94—The commercial engineer for the California distributor of a well known electric refrigerator requests information regarding a book which covers the subject of refrigeration for display cases, commercial storage boxes, insulation losses, K factors and insulations used.

Another Request for Production Figures

Query No. 95—A Canadian distributor is among the many anxious to secure accurate industry statistics. He writes:

"We wish to secure a condensed account giving the history of development of the electric refrigeration industry since Kelvinator began operation. The requirement is for non-technical data relating principally to turn-over figures for the entire industry up to the year 1922 and after that date the approximate turn-over to the main operating companies for each year. Also quotas laid down by the principal operating companies for the present year.

"Could you supply figures of this nature, or if not, suggest where they would be available?"

Will This Home Made Design Work?

Query No. 96—A South Carolina dealer presents the following problem:

"I wish to build an ice box or cooling box to be built about 6 feet square and 7 feet high inside dimensions. I am thinking of building sides top and bottom of good dressed flooring, then putting in 2 inch cork on sides, top and on bottom or floor, then cement all joints then another layer of cork 2 inch butting joints and then have a plasterer cement sides, top and floor just as if you were plastering the walls of a room; only, of course, using cement instead of plaster. What I am particular about knowing is would not this cementing on the cork on the inside do as well as any other way of finishing the inside (of course, as to obtaining the best results as a cooling box). Would the cement make a good permanent finished job and bind properly on the cork, or would you suggest using matched flooring on inside of cork and then on that put zinc all around if you think the cement would answer the purpose? Do let me know, I would appreciate your advice."

Interested in Special Brand

Query No. 97. An automobile supply company (wholesale) located in Missouri writes: "We would also like for you to furnish us a complete list of manufacturers who are manufacturing electrical refrigerators. Would it be possible to have one manufactured under our own name?"

Brazilian Wants Electric Brine Ice Cream Freezers.

Query No. 98.—The following inquiry has been received from Brazil: "Will you kindly put me in touch with concerns manufacturing electric brine ice-cream freezers?

"If you know of any literature on the subject of ice cream manufacture with electric brine freezers, kindly let me know to acquire it."

Desires Latest Books on Electric Refrigeration.

Query No. 99.—A Tennessee central station man makes the following inquiry: "I am interested in obtaining some book on electric refrigeration by some good, reliable author who writes from a neutral view, someone who is qualified to give facts on the subject. One book I know of and am interested in getting is 'Household Refrigeration' by H. B. Hull. If you can furnish it, please let me hear from you and quote me price on it. I wish you would also send me list of other books on the subject and prices, if you can supply them, or where I could get them. I would like to get the very latest edition off the press, and think I can interest others also."

Editor's Note.—Orders for the following books may be sent to ELECTRIC REFRIGERATION NEWS. Please send remittance with order.

"Household Refrigeration" by H. B. Hull. The only treatise on the principles, types, construction and operation of both ice and mechanically cooled refrigerators and the use of ice and refrigeration in the home. In cloth, $3.50.

"Practical Refrigerating Engineer's Handbook," by John E. Starr, a consulting engineer of many years' experience and well known in the ice and refrigerating industry. This pocket-book is an elementary treatise, supplemented with numerous tables containing valuable data on the design, construction and operation of mechanical refrigerating systems. In cloth, $2.50.

"Refrigerating Machines, Compression — Absorption," by Gardner T. Voorhees, S. B. Comparison of capacities and economies of compression and absorption systems, profusely illustrated with original drawings by the author. In cloth, $2.00.

"Principles of Mechanical Refrigeration," by W. H. Motz. The complete subject of mechanical refrigeration presented in a thorough and understandable manner from the fundamental principles to the more advanced operating conditions. In cloth, $5.00.

STREAM CONTROL VALVE FOR WATER COOLERS CUTS WASTE OF WATER

The D. A. Ebinger Sanitary Mfg. Co., of Columbus, Ohio, has developed a valve for controlling the variance of pressure in water lines to which drinking fountains are attached. This device, known as the "Ebco" self-closing automatic stream control regulation valve, is being used on all drinking fountains manufactured by the Ebinger Company.

The primary importance of this valve according to the manufacturer, is the saving in water which it effects. Being automatically self-closing, there is no possibility of neglecting to shut off the flow of water, and by maintaining a convenient, constant drinking stream height, there is no waste of water to secure a desired flow for drinking.

NEW BOOKLETS AND LEAFLETS

Direct Advertising of manufacturers received recently.

Alaska

A small folder has been received from the Alaska Refrigerator Co., Muskegon, Mich., showing eight different Alaska models and giving the detailed specifications for each.

Benjamin

The Benjamin Electric Mfg. Co., 128 So. Sangamon St., Chicago, Ill., has prepared a comprehensive portfolio entitled "Building Up Profits in Electric Refrigeration." This portfolio describes a step by step method of building up a prospect list, the preparation of direct and newspaper advertising, the development of sales follow-up, and presents an actual exhibit of the advertising material for distributors and dealers to use in selling Benjamin all porcelain cabinets for electric refrigeration.

This company has also recently made available a catalog in colors, describing and illustrating the new line of Benjamin all porcelain apartment refrigerators for use with electric refrigeration.

Coldak

From the Coldak Corp., 1775 Broadway, New York City, comes a broadside indicating the advantages of Coldak electric refrigeration for homes, apartments and for commercial application. The new model 500 Coldak commercial machine as well as the domestic unit is illustrated.

A folder also received from Coldak Corp. shows a number of different refrigerators which may be had with Coldak installed. It also describes the Coldak Duplex Unit for 2 family homes.

Demag

In reply to "Query Number 82" (Mar. 28 issue) regarding rotary type compressors the Colonial Supply Co., 217 Water St., Pittsburgh, Pa., sends a catalog descriptive of the Demag rotary compressor made by Deutsche Maschinenfabrik A.-G. Duisburg. Demag rotary compressors are designed according to the single axle enclosed water-meter type and are especially adapted for branches of industry where electricity is the predominating driving power. They are high speed and may be coupled direct to standard electric motors. The cast iron rotor of the compressor is mounted eccentrically and carries thin steel blades located in radial slots. These blades are thrown outward by the centrifugal force, dividing the working space into compartments. The difference in pressure between two neighboring compartments is very small.

Dry-Ice

"Carbon dioxide, a new commercial refrigerant" is the title of an article contained in an 11-page booklet received from the Dry Ice Corp. of America, 50 East 42nd St., New York City. The article is reprinted from *Industrial and Engineering Chemistry* magazine and covers the history of the product, its manufacture and the advantages of its use.

Elwell-Parker

Electric storage batteries, industrial tractors and cranes are illustrated and described in a 39 page catalog received from the Elwell-Parker Electric Co., Cleveland, O. The catalog is profusely illustrated showing how the trucks fulfill the requirements of a transport stacking, tiering or general handling operation.

Filtrine

The Filtrine Manufacturing Co., 51-53 Lexington Ave., Brooklyn, New York, announces a complete new Kelvinator-Filtrine folder showing the 1928 line of Filtrine electric water coolers. A folder entitled "A Message to All Kelvinator Dealers and Salesmen" embodies many helpful sales points on Filtrine equipment.

Copies of this literature may be had upon request from the Commercial Sales Department of Kelvinator Corp., Detroit or direct from the Filtrine Company at the address given above.

Haskelite

A new Plymetl refrigerator catalog has been received from the Haskelite Mfg. Corp., Chicago, Ill. Considerable space is devoted to the cost of both domestic and export shipping and photographs of knocked-down Plymetl cabinets indicate how these costs can be reduced by shipping the flat Plymetl panels in carloads without crating. A number of large cross-sections show the details of the construction of Plymetl refrigerators.

Ice-O-Matic

A 20 page booklet has been received from the Williams Oil-O-Matic Corp., Bloomington, Ill., on the Williams Ice-O-Matic electric refrigerator. This piece of literature tells of the advantages of electric refrigeration in general and Ice-O-Matic in particular, brings out the details in regard to the construction of the mechanical unit, the various possible types of installations, and contains a number of recipes for delicacies to be prepared in the electric refrigerator.

Icerator

A booklet has been received from Autolectric Icerator Corp., 16 Court St., Brooklyn, N. Y., telling of the advantages of Icerator electric refrigeration. A photograph of the Icerator unit installed in a cabinet, is accompanied by a detailed description of it. The booklet is of the type for distribution to prospective retail customers.

Iceless Cooler

Fom Iceless Cooler Corp., 225 North Michigan Ave., Chicago, Ill., comes a folder on the Revolvo-Enduro ice cream cabinet and fountainette Cut-away illustrations show the details of the construction of the two pieces of equipment. Enclosed in the folder are three loose sheets devoted to ice cream cabinets of both the standard and revolvo types, also to the Revolvo-Enduro soda fountainette.

Juruick

A broadside has been received from the American Engineering Co., Philadelphia, Pa., illustrating the Juruick refrigerating unit and showing by accompanying photographs a number of typical installations of this type of equipment.

Luitwieler

Samuel W. Luitwieler of the Luitwieler Cam Pump Co., 212 North Los Angeles St., Los Angeles, Calif., is author of a leaflet, recently received, part of which is devoted to a presentation of the superior features of Luitwieler dry gas refrigeration and part to a general indictment of all other machines which have been foisted upon the unsuspecting public. Mr. Luitwieler quotes Abraham Lincoln and makes a general appeal to high heaven to stop these outrages. The principle used "admits of no discussion," according to the leaflet, which leaves us a little in the dark as to just how the device works.

Eddie Brewer Appointed Electro-Kold District Manager

Electro-Kold Corp., Spokane, Wash., announces the appointment of Eddie Brewer as district manager in charge of the company's affairs in Southern California and Arizona.

W. A. Carpenter Will Manage Kelvinator Sales in Allentown, Pa.

The Pennsylvania Band Instrument Co., Allentown, Pa., recently appointed Kelvinator dealer, has appointed William A. Carpenter, formerly with the Kimmel Electric Co., Allentown, as sales manager.

Newspaper Man Enters Refrigeration Business

Alphonso Johnson, for the past four years business editor of the Dallas, Tex., *News* and *Journal*, has been made vice-president and general manager of the Refrigerator Sales Corp., Tulsa, Okla.

Tulsa Firm Appointed State Distributor for Norge

Electrical Specialties, Inc., Tulsa, Okla., has been appointed state distributor for Norge electric refrigeration. J. C. Binning is president and George B. Rodgers is secretary-treasurer of the Tulsa company.

THE CONDENSER

A CLASSIFIED COLUMN OF OPPORTUNITY

REPLIES to box number advertisements should be addressed to Electric Refrigeration News, 554 Maccabees' Bldg., Detroit, Mich.

ADVERTISING RATES—this column only:

POSITIONS WANTED (special rate if paid in advance): 50 words or less, one insertion, $2.00, additional words 4 cents each. Three insertions, $5.00.

POSITIONS AVAILABLE, For Sale, Business Opportunities, and all other classifications (special rate, if paid in advance): 50 words or less, one insertion, $3.00, three insertions $8.00, additional words, 5 cents each.

LINE RATE (open account): 50 cents per line.

POSITIONS WANTED

ENGINEERING EXECUTIVE, connected with electric refrigeration for ten years, desires connection with responsible manufacturer in temporary or permanent capacity as consulting or chief engineer. Capable of taking complete charge of engineering and manufacturing. Inventor and owner of widely used patents. Well acquainted with patent situation. Box 52.

EXPERIENCED EXECUTIVE, former factory superintendent, now general service manager for large distributor of a leading electric refrigerator, desires change. Man with strong background of business experience, with employers' interests at heart, references of highest class. Prefers to affiliate with similar industry having generous territory centered in large metropolis. Box No. 76.

REFRIGERATING ENGINEER. At present employed. Seeking new connections. Seven years experience designing, producing and manufacturing. Other details upon interview. Box 77.

EXECUTIVE, with over 6 years' experience in electric refrigeration development, production, sales and service. Graduate electrical and mechanical engineer. Box 79.

Permanent position wanted by refrigeration service and installation man. At present pleasantly employed but would like a change offering better opportunities. Seven years' experience of Frigidaire. Can handle all phases of Frigidaire work. Also some experience on other makes. Wages not as important as pleasant working conditions. Prefer some distributor or dealer with large territory and would like to take service department on own responsibility. Box 78.

FOR SALE

SALE OR RENT FACTORY—WAREHOUSE

Manufacturing plant suitable for wood or steel refrigerators. Also suitable for warehouse. Four floors, 40,000 square feet total, elevator, dust conveyor, large lumber storage, fire sprinkler system, 75 horse-power water wheel, dry kiln, new heating system, 50 miles from New York and Philadelphia—65 from Scranton on concrete highways. Two railroads, low taxes and non-union labor. Write Wm. F. Morris, 30 West Blackwell St., Dover, N. J.

Refrigeration Service Co., Inc.
SERVICE SPECIALISTS
Maintenance, Installations, Alterations, Repairs
New York City
Telephone: Chickering 0460
Office and Works 449 West 42nd St.
Warehouse 281 11th Ave.

FOR SALE
A low price household REFRIGERATING MACHINE. Production Drawings, Patterns, Patent Situation and OPERATING MACHINES. Box 80.

DRINKING WATER FAUCETS
for
Refrigerators - - Water Coolers
Cordley & Hayes
1 Leonard St. New York City

REFRIGERATION PATENTS
SPECIALIST IN HOUSEHOLD MACHINES AND WATER COOLERS, INVESTIGATIONS, REPORTS, SEARCHES. SPECIAL ATTENTION PAID TO ASSOCIATE WORK.
H. R. VAN DEVENTER
SOLICITOR OF PATENTS
342 Madison Ave.
NEW YORK CITY

Wanted
District Representatives

Servel Sales, Inc., manufacturers of Servel Compression and Electrolux absorption type refrigerators, have openings for two or three high grade men as district managers.

We will be particularly interested in men who have had experience in field sales work involving distribution through territory franchises.

With the rapid expansion of the Servel dealer organization we are continually having opportunities for trained men. Openings now exist in some of the best territory and the men we select must be qualified in character and experience to assume real responsibilities in this organization—one of the leaders in the industry.

All replies should be addressed

General Sales Manager,
Servel Sales, Inc.,
Evansville, Indiana.

Subscription Order

ELECTRIC REFRIGERATION NEWS,
554 MACCABEES BUILDING, DETROIT, MICH.

Please enter my subscription to Electric Refrigeration News.

United States and Possessions:

☐ $1.50 per year. ☐ Three years for $3.00.

All other Countries:

☐ $1.75 per year. ☐ Two years for $3.00.

I am enclosing payment in the form of

☐ Check ☐ P. O. Order ☐ Cash

Name.....

Street Address.....

City and State.....

Remarks:.....

ELECTRIC REFRIGERATION NEWS

The business newspaper of the electric refrigeration industry

VOL. 2, NO. 20, SERIAL NO. 44 | Copyright 1928 by Business News Pub. Co. | DETROIT, MICHIGAN, JUNE 6, 1928 | Entered as second class matter August 1, 1927, at the Post Office, Detroit, Michigan. | PRICE TEN CENTS

Engineers Study Latest Refinements in Science of Refrigeration Service

A. S. R. E. Opens Meeting in Detroit with Papers by Prominent Technical Authors

EARLY attendance registration figures for the Fifteenth Western Meeting of the American Society of Refrigerating Engineers which opened at the Hotel Statler, Detroit, Michigan, on Monday, June 4, and which will close Thursday, June 7, indicated that this meeting would be one of the most successful in the history of the organization. Parties from Chicago, New York and Buffalo were present for the opening session and the attendance list was swelled by those coming in throughout the first day.

The meeting of the Council of the society called at 10 o'clock and which was open only to the members of the Council was followed at twelve thirty with a luncheon to all officers, directors, chairmen of the divisions of the Program Committee and the authors of papers to be presented during the four-day meeting. The formal opening of the meeting came at two o'clock Monday afternoon when George B. Bright, president of the national organization, welcomed the visitors to Detroit. Following President Bright's welcome the session was devoted to society affairs of a business as well as a technical nature including a number of reports.

The business session was opened with a formal report by David L. Fiske, secretary of the A. S. R. E., covering the work of the Council during the past six months. This led to reports by the Development Committee explaining the progress of the work undertaken by President Bright in developing the membership and financial sides of the work of the society. Vice-President H. D. Edwards, of the Linde Air Products Company, responsible for considerable effort along these lines, introduced the subject and turned the meeting over to H. I. Lewis, manager of the refrigerating division of the American Engineering Company, Philadelphia. Mr. Lewis spoke on the development of local groups in various cities and brought out the growth of the parent organization with the aid of a chart.

The total membership in the parent organization on December 1, 1927, was six hundred eighty-eight. This has been increased to nine hundred eighty-seven as of June 1, 1928, and a mark of twelve hundred forty members by 1929 has been set.

The next division of the business program took up the technical studies of the Program Committee. David L. Fiske, secretary of the society, read a report made by Fred Ophuls, past president of the society and consulting engineer in New York City, which told of the development of the Publication Committee in bringing about more thorough and elaborate technical papers for presentation at the meetings and for printing. A. W. Oakley,

(*Continued on Page 23, Column 2*)

KEILHOLTZ CALLS SECOND MEETING OF ENGINEERS

To Complete Plans For Automatic Refrigeration Association

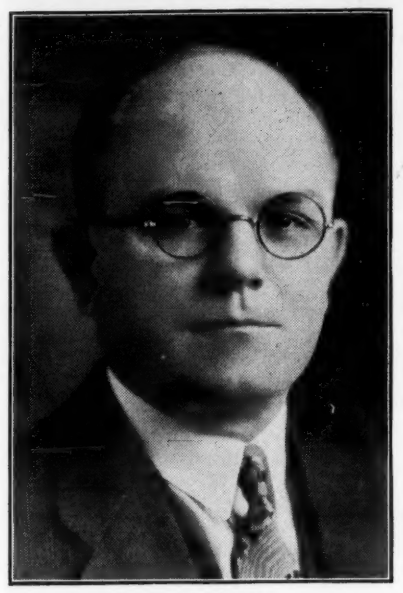
THE Automatic Refrigeration Association, which held a preliminary meeting at the Hotel Statler, Detroit, on April 10, has been called to a further meeting at the Hotel Statler at 10 a. m., Wednesday, June 20, by L. H. Keilholtz, chairman, for the purpose of submitting to the organization for adoption a proposed constitution and by-laws.

A report of the preliminary meeting appeared in ELECTRIC REFRIGERATION NEWS, of April 11.

Chief engineers of all companies manufacturing automatic refrigerating machines (electric or gas) of 1-ton capacity or less, are invited to attend and participate in the activities of the new organization. It is contemplated that membership will consist of companies, rather than individuals, with engineers appointed to represent such company members at the meetings.

Leaders in the movement, including L. H. Keilholtz, chief engineer of the Frigidaire Corp., and C. C. Spreen, chief engineer of the Kelvinator Corp., have considered it desirable to proceed with the completion of the association as originally planned, without waiting for further developments in connection with the new Refrigeration Manufacturers Council which was organized in Detroit, May 9. It is possible that the engineers' association will eventually become a part of the Council.

The meeting at which the Refrigeration Manufacturers Council was organized was reported in the May 9 issue of the NEWS.



L. H. Keilholtz
Chief Engineer, Frigidaire Corp.

COMING—ANOTHER DOUBLE-HEADER ISSUE

In this issue ELECTRIC REFRIGERATION NEWS has rendered an unusual service to the industry by providing a close-up of the opening events at two important conventions, one in Atlantic City and the other in Detroit, while both meetings are in session.

Special arrangements were necessary in order to assemble this material and distribute copies of the paper at both places. One section was printed in Detroit and another in Philadelphia, with assistance of air mail, telegraph and top-speed night-and-day work by engravers and printers.

In the next issue, June 20, a *complete* report of both meetings will be given, together with additional pictures and news secured during the remaining sessions. This material will be most interesting to those who were unable to attend the events and will be particularly valuable to many who would have liked to be present at both the central station and engineering discussions of electric refrigeration.

CLASSIFIED DIRECTORY APPEARS IN THIS ISSUE

Attention is called to the Classified Directory of the manufacturers of refrigeration systems, materials, accessories, etc., which appears, for the first time, in this issue. This convenient arrangement should be especially helpful to buyers and distributors.

Every effort was made to obtain complete data but no doubt some names of suppliers have been omitted. Notice is given, however, that this Directory will be repeated in a later issue with additions and corrections. Manufacturers are requested to furnish information for the revised edition without delay.

Central Station Executives See Electric Refrigeration As Greatest Load Builder

Latest Developments in Household and Commercial Systems Presented at N. E. L. A. Exhibition

THE 51st Convention and Exhibition of the National Electric Light Association opened June 4, at the Million Dollar Pier, Atlantic City, N. J. As has been almost invariable for the past decade each convention of the N. E. L. A. has surpassed the mark set by the previous gatherings. This is most evident to the casual visitor in the enormous range and elaborate character of the exhibits, and their increase in number from year to year.

The great Young's Pier carried on the opening day a long succession of their display of an electric character, including, of course, displays of automatic electric refrigeration units, which were the subject of great attention from the visiting public that thronged the aisles from the hour of opening, most of the large companies in this specialized field being represented.

The McCord Radiator & Mfg. Co., of Detroit, exhibits in Space 200 a special display of their capacity as a source for the manufacturing trade, being condensers of various types for domestic and commercial machines, made up in one piece of hot tinned seamless copper tubing with fins of great radiative capacity for use with refrigerants other than ammonia. For ammonia systems the assemblies are made up similarly in steel. Another feature is the new McCord seamless spun-end copper tube refrigerant receiver on which patents are still pending, and adapted to quantity production. The McCord evaporator units for flooded and direct expansion systems are part of the display, and a most interesting group are the new patented evaporators assembled from die-shaped sheet copper pieces assembled in pairs and united by a lock seam at the edges, making units of very light weight and of great surface and high thermol efficiency. The exhibits, including large commercial condensers in seamless copper and steel, are in charge of Edward Bodkin, R. M. Hyde, T. W. McMillan, and Wm. Ruch.

Kelvinator has a display of 16 domestic models in regular production, omitting the apartment house models of their multiple system. A notable part of the line is the three boxes in Chinese mandarin, apple green and Jersey cream. The M. G. & J. condenser units are shown for domestic and the WB in commercial capacity with a series of big freezing coils for display cabinets in store installations. Some of these special trade assemblies with Kelvinator machines installed are a commercial cooler by Hussmann of St. Louis, a Hill Dry-Cold display case by Hill of Trenton, and an Oriole florists' cabinet made in Baltimore with a Reich two-temperature soda fountain taking ice cream, and operated by one Kelvinator machine.

(*Continued on Next Page*)

CONFERENCE TO CUT NUMBER OF ICE CAKE SIZES

Committee Recommends 25, 50, 100 and 150 Pound Standards

R. L. LOCKWOOD, of the Division of Simplified Practice of the Department of Commerce, pursuant to recommendations by the Simplified Practice Committee of the refrigeration industries under Geo. B. Bright, chairman, made at a meeting held May 18 in Detroit, has called a meeting for 10 a. m. Wednesday, June 13, at 704 Commerce Bldg., Washington, D. C., to which all producers, distributors and organized consumers of ice are invited, for the purpose of standardizing the dimensions and weights of ice cakes for use in domestic refrigerators.

Following is a list of the proposed weights and dimensions, together with a review of the history of the project.

Recommendations of Committee

The Simplified Practice Committee of the Refrigeration Industries recommends that the weights and maximum dimensions shown in the following list be adopted as standard for the industry:

Weight	*Depth*	*Width*	*Height*
25 lbs.	12 inches	12 inches	8 inches
50 "	12 "	12 "	16 "
*75 "	12 "	12 "	24 "
100 "	12 "	16 "	24 "
150 "	12 "	24 "	24 "

(*Note: The Committee recommends that the 75 lb. size be ultimately eliminated.)

The above weights are recommended to cover all requirements for household refrigerators. Dimensions listed opposite each weight are to be maximum dimen-

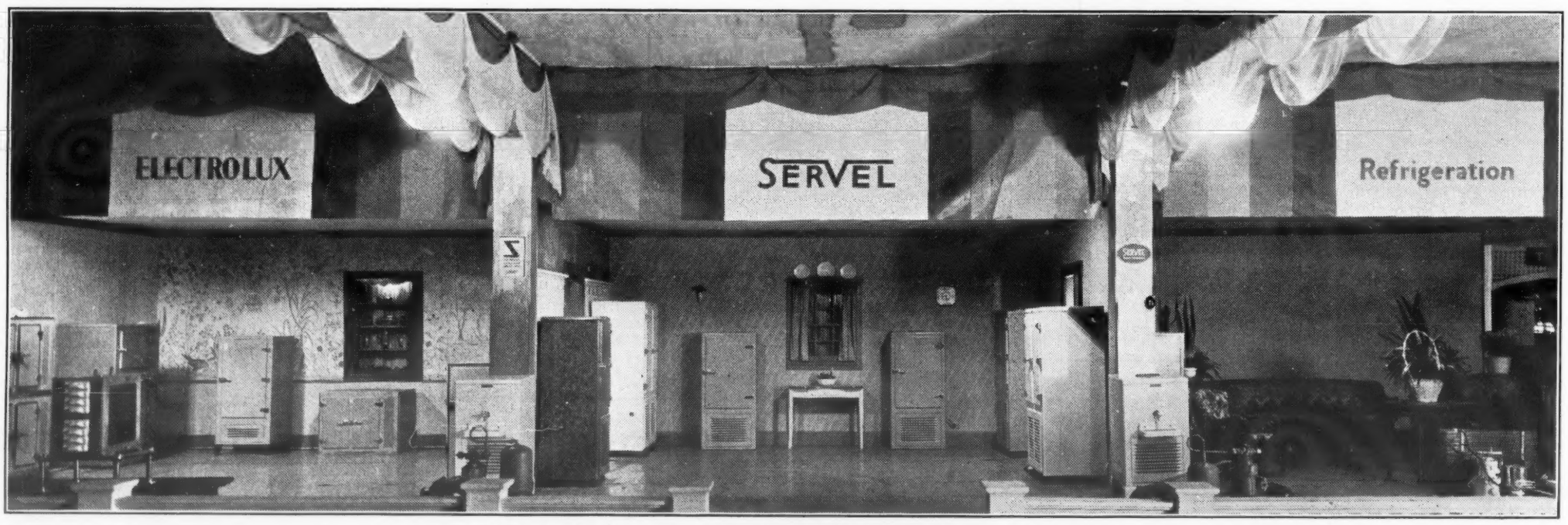
(*Concluded on Page 20, Column 2*)

Early Arrivals of the Electric Refrigeration Contingent at the Big Boardwalk Event

Big Electric Refrigeration Showing Again Dominates the N. E. L. A. Exhibition

Welsbach Shows Numerous Commercial Applications

A Wide Variety of Models Is Shown by Kelvinator Corporation

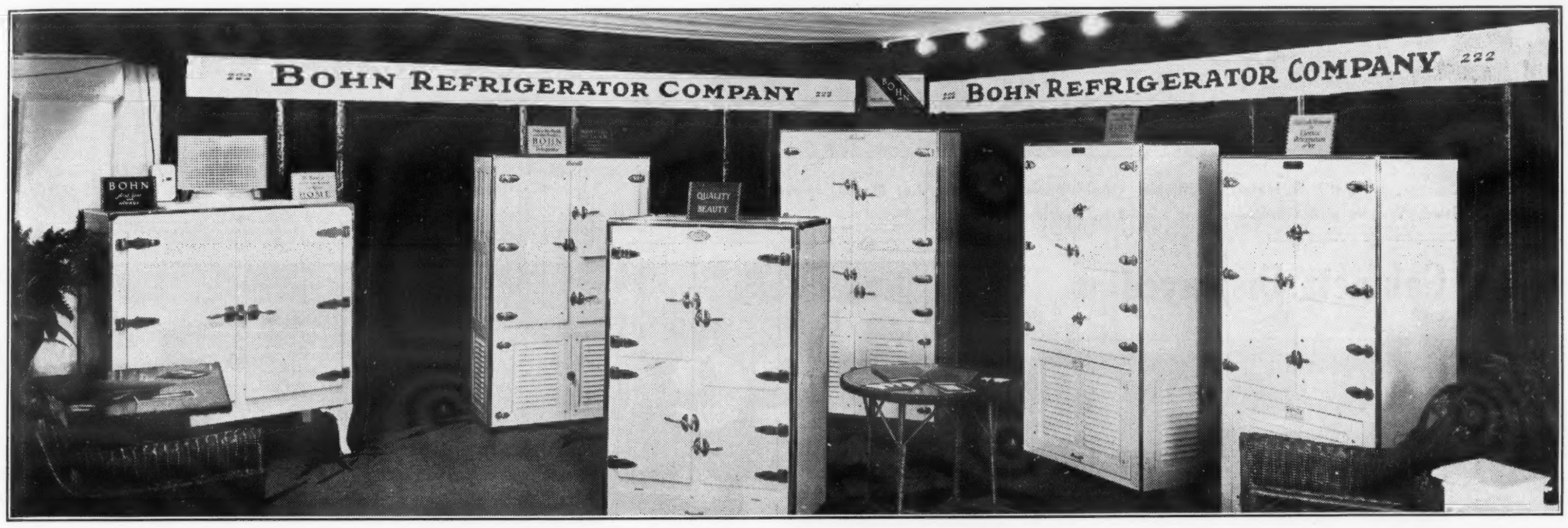


Servel Displays Gas and Electric Units in Home Settings

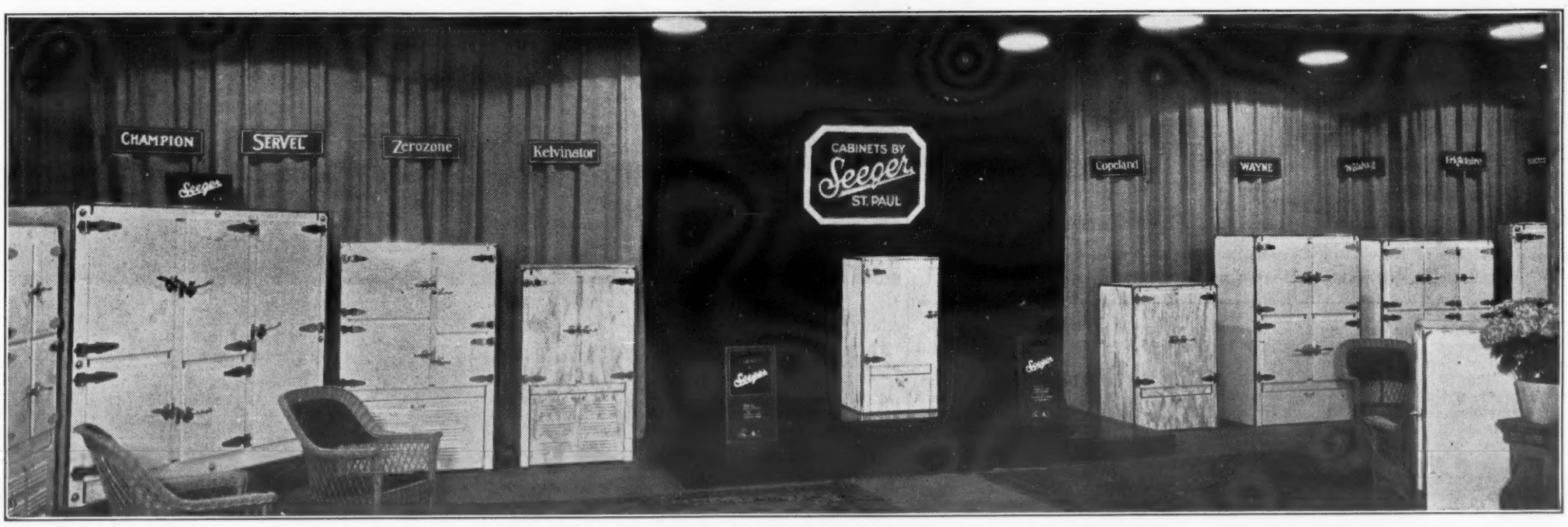
DeLuxe Color Cabinets and Silica Gel Feature Copeland Exhibit

Elaborate Displays by Many Leading Manufacturers of Electric Household and Commercial Refrigerating Units Attract Attention of Central Station Men at N. E. L. A. Convention, June 4-8

Large and Colorful Display of Frigidaire Corporation



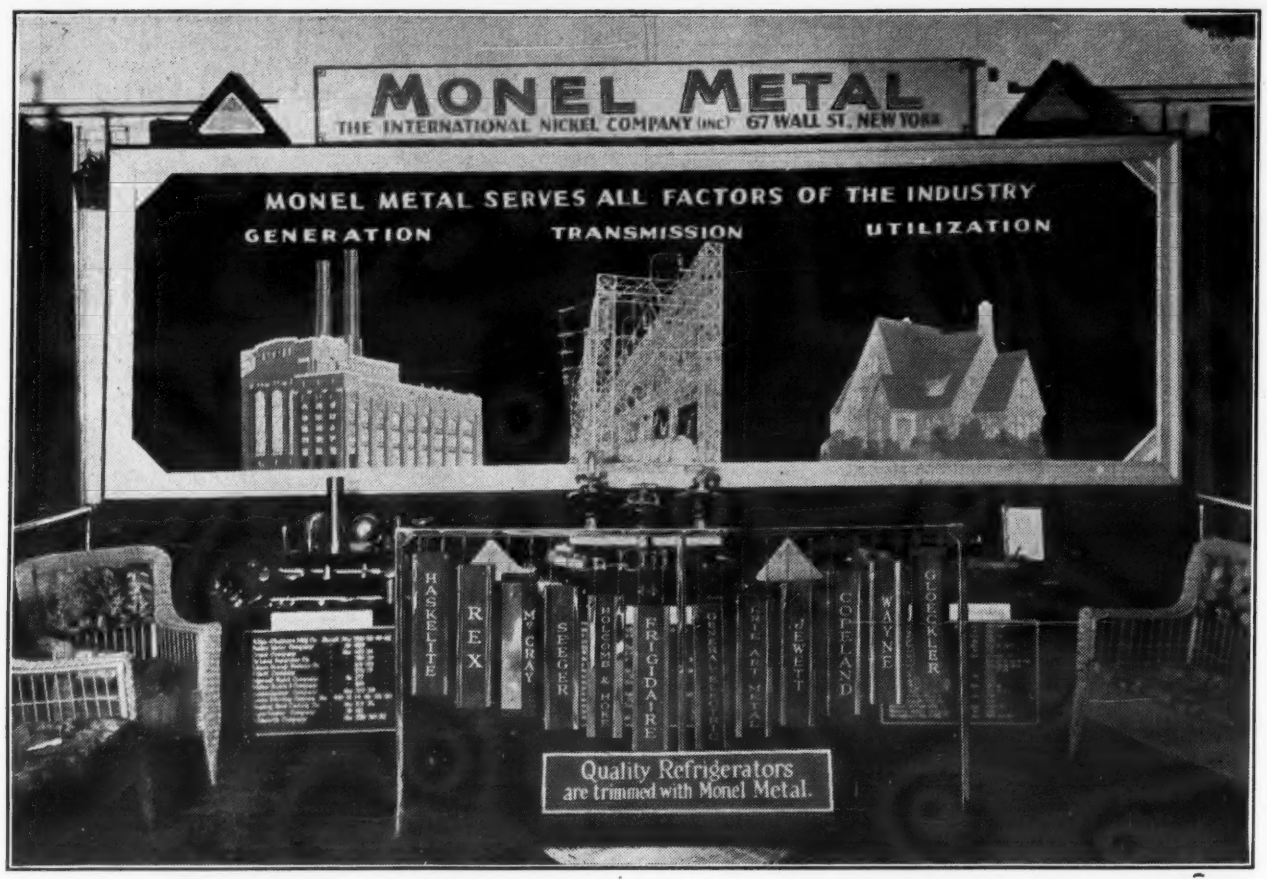
An Attractive Line of Cabinets by Bohn Refrigerator Co.



Emphasizing the Large Number of Companies Using Seeger Products

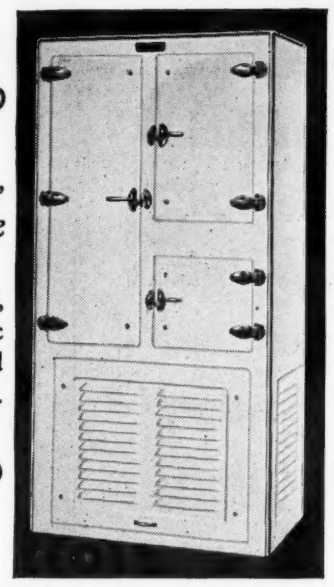
McCord Radiator Co. Exhibits Condensers for all Types of Machines

Array of Monel Users Among Cabinet Builders Featured By International Nickel Company



Haskelite, Rex, McCray, Seeger, Holcomb & Hoke, Frigidaire, General Electric, Erie Art Metal, Jewett, Copeland, Wayne and Gloeckler Are Listed in the Monel Line-up.

BOHN'S *Latest Achievement* — The New
BOHN "Super Quality" Refrigerator



Beautiful, Distinctive

Can be had in 5, 6, 7, 9 and 12 cubic foot net food storage capacity.

White Porcelain Enamel inside and outside. The machine compartment is ideal for storage space where remote installation is made.

[Featuring the Insulated Baffle Wall]

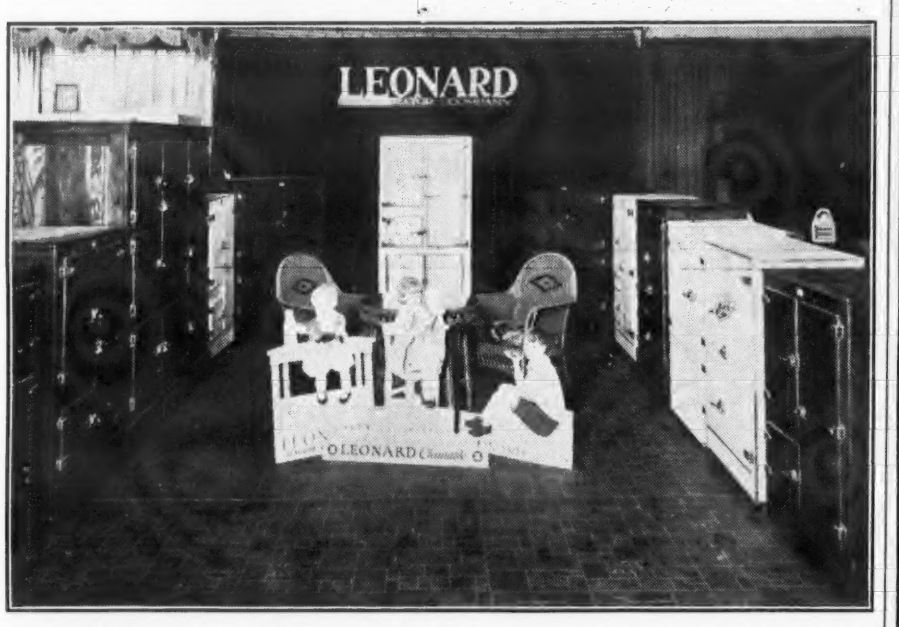
The lowest prices in our 31 years of manufacturing *"Super Quality"* Refrigerators

BOHN REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

These models are on display at our own stores in

NEW YORK 5 East 46th Street
CHICAGO 227 No. Michigan Blvd.
BOSTON 707-709 Boylston Street

Leonard Cabinets Displayed



Leonard Division of Kelvinator Corporation Shows Variety of Models Adjoining the Big Central Staging of Kelvinator Products.

(*Continued from Page 1, Column 5*)

A 3-hole Kelvinator ice cream and bottle cabinet of their own construction represents their line in sizes up to 12-hole units. There is a Kelvinator equipped K-system Filtrine self-contained water cooler shown also. The display is in charge of J. A. Corcoran, Theodore Slade, A. H. Goss, W. D. Mercer, H. W. Burritt, R. E. Densmore, H. A. Sieck, John Fernald, H. A. D'Arcy, Katherine Cornell, R. E. Lundquist, Ray Martin, W. O. Crabtree, Campbell Wood, J. S. Sayre and F. J. Foersterling. The Leonard cabinets for ice and to take Kelvinator machines are displayed next to the Kelvinator exhibit.

In the exhibit of Copeland Products, Inc., the new Silica Gel type of refrigeration is shown in operation.

In this type of machine, the Silica Gel, through the principle of capillary attraction, adsorbs the vapor, which is then forced into the condenser unit by application of heat, thus replacing the compression unit. The only moving part is a small electric fan, which cools the condenser.

The new multiple unit of Copeland also exhibited was put on the market early this year, throwing Copeland into the apartment house field.

The new De Luxe line, in six interchangeable and optional colors, gets much favorable comment. Copeland, studying the color vogue for a long time, evolved this type which can be changed easily to meet any color scheme which the housewife may wish. The tops and grill fronts are colored. The rest of the cabinet is white. If the housewife wishes to change her color scheme from green to blue, all that she need do is to change her tops and grill fronts.

The exhibit occupies spaces 212, 214 and 214A, and is in charge of C. W. Haddon of the executive staff, W. D. McElhinny, George W. Mason, president, F. Williams, K. S. Baxter and A. M. Taylor.

The Frigidaire exhibit opposite that of the McCord organization included a showing of all their domestic models, A. P. line Wales Cooler units 1 and 2, ice cube maker, a 2 hole ice cream cabinet representing the line of 2 to 12 hole capacities, and a commercial unit. Separately shown were the Model O ½-hp., air-cooled compressor, the commercial water-cooled 1-hp. C, and the air-cooled model D for multiple installations, and Model G for medium and large systems. A Frigidaire apartment house cabinet for installation as a multiple system unit is shown. The personnel of the Frigidaire exhibit includes W. R. Winans, James Knight, T. G. Supplee, Geo. Jones, Geo. Durban, Stephen Burrows and J. A. Harlan, sales manager, of the sales staff. The remarkably attractive scenic decoration and arrangement of the exhibit was achieved by Messrs. Doty and Matchler, of the advertising department of Frigidaire.

The Savage Arms Corporation have a variety of electrical products in exhibition space 209, at the left of the main aisle, near the entrance, and adjacent to some of the other refrigerator showings. Particular objects of interest are their ice-cream cabinet, and a sectioned model of their compressor unit. This refrigeration system is the Mercury type, and differs from all others being shown. The personnel are Messrs. Meyer, Roi B. Woolley and Weston Vogel.

Servel shows several domestic units in compressor models for electric and Electro-Lux in absorption models for electric or gas operation. The absorption EL-5 "Table top" unit is shown separately and as a base for an electric range. The Servel compressors for commercial installations are exhibited in capacities from 250 to 1,000 lbs., and Servel self-contained water coolers with a 125-lb. compressor installed.

H. W. Foulds, general sales manager, is present with J. M. Bickle, Wm. Reynolds, B. O. Brown, H. L. Bickle, J. Wood Sweeney, Seward Abbott, Mr. Carter, H. S. Simmons, C. A. Miller, Roderick Peters, George Knowles, and F. A. Janney.

(*Continued on Page 3, Column 1*)

See Silica Gel!
The remarkable New Refrigeration Process

Introductory Display by Copeland at the N. E. L. A. Convention, Atlantic City

Silica Gel, the new adsorption process for commercial refrigeration, will be displayed and demonstrated by Copeland at the N. E. L. A. Convention, Atlantic City, June 4 to 8. ⬡⬡⬡ Those who attend the Convention are urged to visit booths 212, 214 and 214-A, Young's Million Dollar Pier, where they will find actual working units on display. ⬡⬡⬡ There will also be on display the complete line of Copeland Dependable *Electric* Refrigeration — including magnificent new De Luxe models in six optional interchangeable colors, multiple installations for apartments, separate units for present ice boxes, units for commercial refrigeration and water coolers. Do not fail to see this comprehensive exhibit of both Silica Gel and Electric Refrigeration!

COPELAND, 630 LYCASTE AVENUE, DETROIT, MICHIGAN

Copeland
DEPENDABLE ELECTRIC REFRIGERATION

Unusual Illuminating Effects Mark Layout of Electrical Testing Laboratories

Samples of Electrical Devices Which Have Been Tested for Clients Are Shown in an Artistic Setting.

Motor Parts Shown by Wagner

A Demonstration of Motor Ventilation and the Detail of Fractional Horsepower Motor Construction Are Displayed by the Wagner Electric Company.

Kitchen Appliances by Savory

Refrigerators and Utensils of Unusual Character Attracted Attention in the Savory Booth.

(*Continued from Page 2, Column 2*)

These gentlemen either are usually at Evansville, Ind., or in the Servel executive office in New York.

"Cabinets by Seeger" form a fine array of 3 commercial and 13 domestic boxes, all of which are designed to accommodate automatic units. One of the exhibits was a Seeger cabinet with a G-E installation to typify the trade group using Seeger cabinets—Absopure Champion, Copeland, Everite, Electro-Kold, Frigidaire, General Electric, Iceberg, Kelvinator, Norge, Servel, Universal, Welsbach, and Zerozone. Among the Seeger showing were their "Cirrus" finishes in gray, green and yellow on a white ground. The sales manager, J. J. Leonard, heads the group. H. H. Webber, H. F. MacGrath, A. G. Wootton, and G. J. McLeer, who are in personal charge of the Seeger showing.

A few steps away the Bohn exhibit comprised of cabinets such as are largely used in the General-Electric output. The domestic units are in white, and present an attractive arrangement. The Bohn exhibit includes a cabinet in which a General-Electric unit is mounted. The exhibit is cared for by Abner Davis, Jr., sales manager, and R. G. McCord, eastern representative.

Accessory to automatic refrigerator unit manufacture is the non-corroding alloy of nickel and iron, known as Monel metal, and produced by the International Nickel Company, which makes one of the best materials for refrigerator members and trims. An extremely long list of refrigerator cabinet makers is displayed as among those using Monel metal on their boxes.

The Electrical Testing Laboratory has a showing of extreme beauty, in which lighting effects play a leading part. This organization is of great technical importance to the central-station companies of the United States and Canada, in that it possesses special facilities for making exhaustive tests of all sorts of devices in which the electric power companies are interested. It is a part of their labor to give exhaustive tests to electrical refrigerators, which power companies propose to distribute within their territories, and for this purpose operates unique special testing rooms at various temperatures, etc., which record by meters and other devices the practical efficiency of the refrigerators submitted to them by their clients. These costly rooms render impartial and accurate judgment on refrigerators placed in them. The exhibit of Electrical Testing Laboratories consists of many articles and units which have come under their care or have been devised or submitted, together with graphs and other forms of data. The exhibit is well towards the rear of the pier, on the right side, and is interesting to the manufacturer of automatic electric units and to the engineer and all central station personnel.

The General-Electric showing is located at the far end of the pier, and has as the display piece a special job in black onyx effect. The balance of the models are domestic designs in white, including two "Ambassador" units. Those in charge

(*Continued on Page 6, Column 1*)

If they say "It can't be stamped" *come to G.P.&F.*

The design and production of stampings is a highly specialized job demanding long experience.

G. P. & F. Engineers have knowledge accumulated through 48 years. Their resourcefulness has solved many tough problems, pronounced impossible by others.

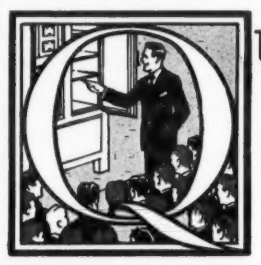
The history of G. P. & F. contains the stories of many such achievements — many instances where a product has been improved, costs reduced, and sales increased: advantages made possible only by G. P. & F. skill in design and efficiency in production.

Write for the booklet "Stampings" which gives complete information.

GEUDER, PAESCHKE & FREY CO.
Sales representatives in all Principal Cities in all parts of the Country
1366 St. Paul Ave., Milwaukee, Wis.
345 W. Ohio Street, Chicago, Ill.

G.P.&F. STAMPINGS
"KNOWING HOW SINCE '81"

A CATECHISM
for
men who wish to *know*
their "*electric*" refrigeration



Question · · · · ·

Now scholars, tell me, what is Refrigeration?

Answer:

The dictionary says, it's "Reduction of heat—"

Q But doesn't it say "Reduction of heat by Electricity"?

A No. Because electricity doesn't reduce it!

Q But I thought "electric" refrigeration was an electrical problem.

A Not at all. Electricity is only one of many forces which can be made to operate a refrigerating system. And with minor changes and adjustments, the electrical apparatus used has been standard for years.

Q Then what causes this Reduction of Heat?

A The alternate expansion and contraction of a chemical from gaseous to liquid form.

Q Then to build an efficient refrigerating system one should be an authority on heat? And on the action of gases?

A Now you're getting warmer.

Q What name is best known in America for its accomplishments in these fields?

A Welsbach.

Q How has Welsbach used its leadership in these fields?

A By perfecting Low-Pressure Refrigeration. Welsbach mastered problems previously thought impossible; created a simplified mechanism; evolved a new lubricant; flooded internal moving parts with a liquid seal and safeguarded them against wear.

Q Then you think Welsbach has a basis for its amazing success this year?

A Absolutely. And my advice is, Watch Welsbach!

Welsbach Company, Gloucester City, N. J.

Electric Refrigeration Occupies Lead Position in Big Exhibit of G. E. Products

G. E. Demonstrator Serves Ice Cream Made by the Sparklet Aeration Process.

One of the most popular places at the N. E. L. A. Convention this week is the Hot Point Section of the General Electric Company's exhibit. Here the electric refrigeration department of G. E. joined forces with Sparklets, Inc., 25 West 44th Street, New York, N. Y., to make an interesting demonstration of a new and quick method of making frozen desserts in electric refrigerators.

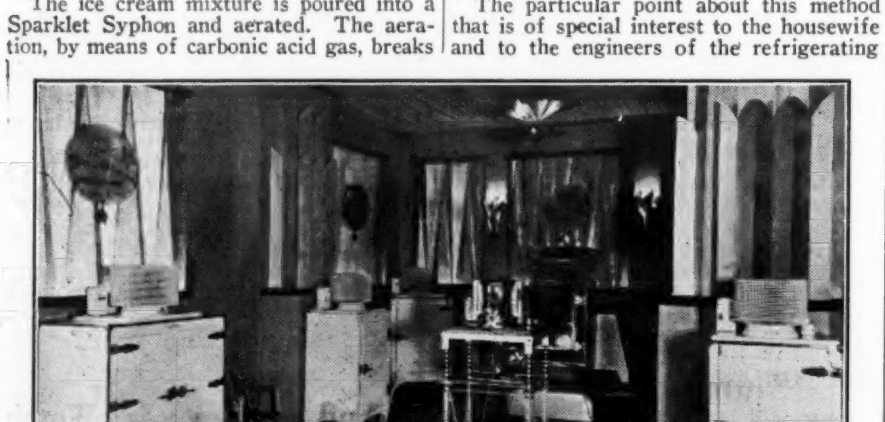
The different varieties of ice cream were made in General Electric refrigera- served to convention visitors at this booth tors by the Sparklet aeration method.

The ice cream mixture is poured into a Sparklet Syphon and aerated. The aeration, by means of carbonic acid gas, breaks the creams and sugars and fruit juices up into a very fine light globular mass, which is aerated many more times than was possible by the former method of stirring. This aeration results in a very small, fine-grained but deliciously light cream.

As soon as it is aerated, the mixture is drawn off into one of the trays and placed in the freezing chamber of the refrigerator. No further attention is required—no stirring whatever. At the end of three or four hours, depending upon the temperature of the refrigerator, the mixture has become perfectly frozen and is ready to serve.

The particular point about this method that is of special interest to the housewife and to the engineers of the refrigerating companies, is that the cream not only is very highly aerated and a smoother texture developed, but it is unnecessary for the housewife to stir it or pay any attention to it whatever.

Extensive tests of this method have been conducted in the laboratories and domestic science kitchens of many of the large refrigerating manufacturing companies, as well as domestic science institutes, and the results have been declared uniformly satisfactory.



Futuristic Exhibit Featuring Special G. E. Unit in Black Onyx

PITTSBURGH ENGINEERS INSPECT KELVINATOR PLANT IN DETROIT

Under the guidance of their hosts, The Detroit Engineering Society, with P. A. Fellows, chairman of the entertainment committee, the Engineers Society of Western Pennsylvania arrived by boat at Detroit, from Cleveland, on Friday, May 25. The visitors enjoyed a dinner at the Detroit Yacht Club on Belle Isle in the evening, after a day spent sight-seeing. On Saturday, May 26, the engineers inspected the Ford airport and Stout airplane factory, following with an inspection of the Kelvinator plant, where luncheon was served. The afternoon was spent at the Redford Golf Club previous to returning by the night boat to Cleveland.

NEW ORLEANS DEALERS PUT ON REFRIGERATION SHOW

Practically all of the more prominent makes of electric refrigerators were exhibited at the Electric-Automatic Refrigeration Show which opened in the State Building, May 21, New Orleans, La.

Electric refrigerator distributors co-operating with the Louisiana Coca Cola Bottling Co., put on display what was said to be one of the most complete electric refrigeration shows which has been held in the South.

Special educational demonstrations were put on by pupils of city high schools and entertainment was provided. Among those who had displays at the show were the following: Woodward Wight Co., General Electric; Gulf Sales, Inc., Kelvinator; Mayer Godchaux Co., Zerozone; Edward Eberling Co., Inc., Copeland; A. Baldwin Co., Inc., Servel Electrolux and Frigidaire Corp., Frigidaire.

Appreciation

We realize that no small measure of the success that the General Electric Refrigerator enjoys today is due to the splendid cooperation it has received from the many central stations and dealers who have accepted it.

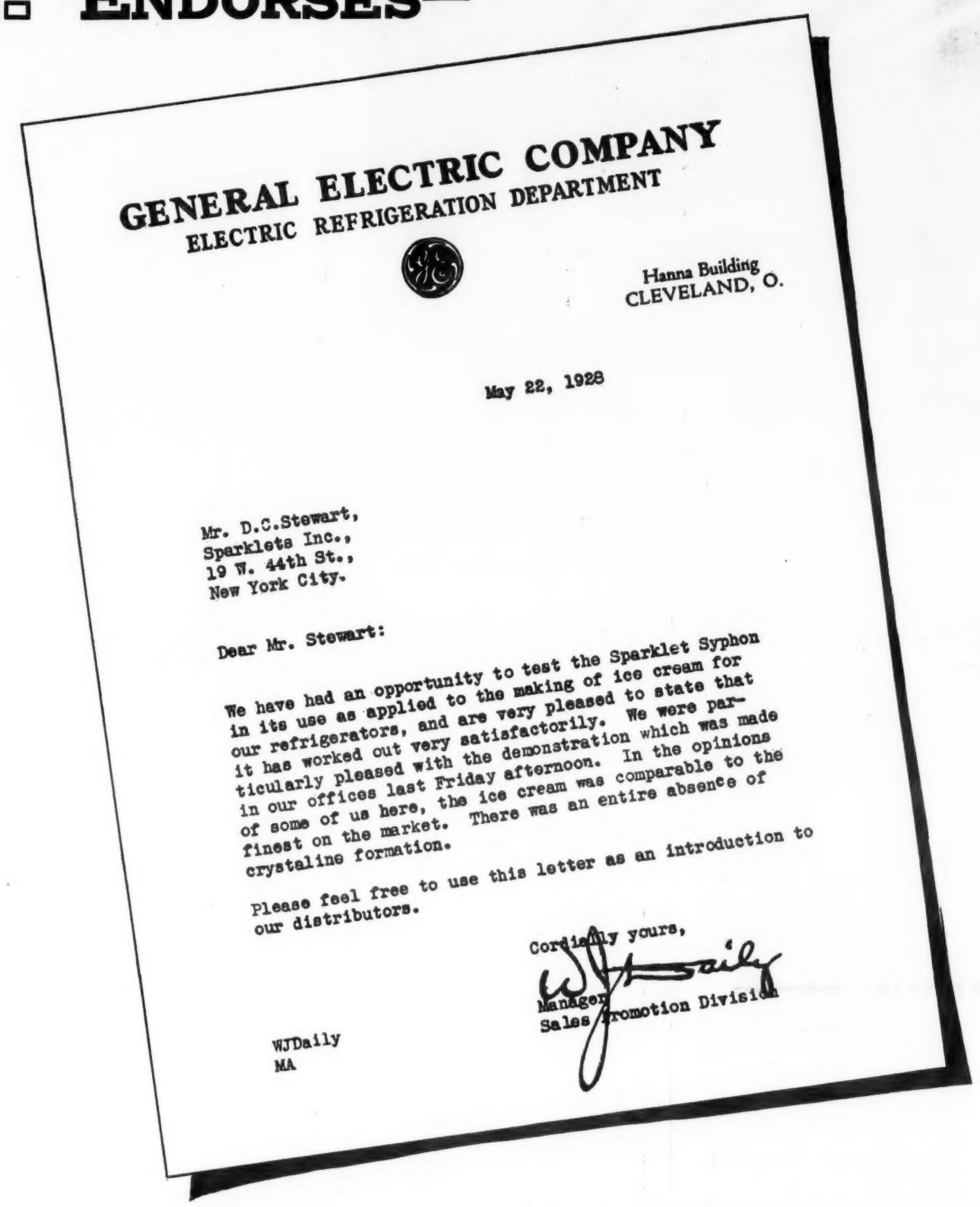
We, therefore, take this opportunity to thank you for the important part you have played in our success . . . a success based on your good-will and confidence, as well as the good-will and confidence won by the mechanical perfection of the product itself.

It is interesting to note that although the General Electric Refrigerator entered the market but twelve months ago, the majority of the Central Stations in the country are to-day merchandising this outstanding, revolutionary product!

GENERAL ELECTRIC
Refrigerator

ELECTRIC REFRIGERATION DEPARTMENT • OF GENERAL ELECTRIC COMPANY • HANNA BUILDING • CLEVELAND, OHIO

G. E. ENDORSES—



GENERAL ELECTRIC COMPANY
ELECTRIC REFRIGERATION DEPARTMENT

Hanna Building
CLEVELAND, O.

May 22, 1928

Mr. D.C.Stewart,
Sparklets Inc.,
19 W. 44th St.,
New York City.

Dear Mr. Stewart:

We have had an opportunity to test the Sparklet Syphon in its use as applied to the making of ice cream for our refrigerators, and are very pleased to state that it has worked out very satisfactorily. We were particularly pleased with the demonstration which was made in our offices last Friday afternoon. In the opinions of some of us here, the ice cream was comparable to the finest on the market. There was an entire absence of crystaline formation.

Please feel free to use this letter as an introduction to our distributors.

Cordially yours,

Manager
Sales Promotion Division

WJDaily
MA

THE MOST DELICIOUS ICE CREAM YOU EVER TASTED!

Made without Fuss or Inconvenience

by the Sparklet Aeration Method

Now you can make—in your home refrigerator—perfect ice cream without labor and attention.

Simply prepare the mixture for whatever flavor or kind of ice cream you desire by following the Sparklet recipes; aerate it in the Sparklet Syphon; discharge into the freezing tray; place it in the freezing compartment—the same as you would your ice cubes—*and forget it*.

When lunch or dinner time comes your ice cream will be ready—perfectly frozen—of the creamiest, smoothest texture and with a distinctive flavor all its own.

MADE WITHOUT STIRRING!

And remember, this process does away entirely with all stirring, watching or attention whatever.

You simply prepare your recipe; put it in the freezing tray and forget it until you wish to serve it.

This new process solves for all time the problem of how to make perfect ice cream with your mechanical refrigerator. It adds an unlimited number of new and delightful desserts to the daily menus of the home—frozen desserts that can be easily and quickly prepared.

Demonstration all Convention Week at the General Electric N. E. L. A. Exhibit, where a variety of delicious ice creams and ice cream sodas are being served.

Also shown at the G. E. permanent exhibit on the boardwalk at the Central Pier, Atlantic City.

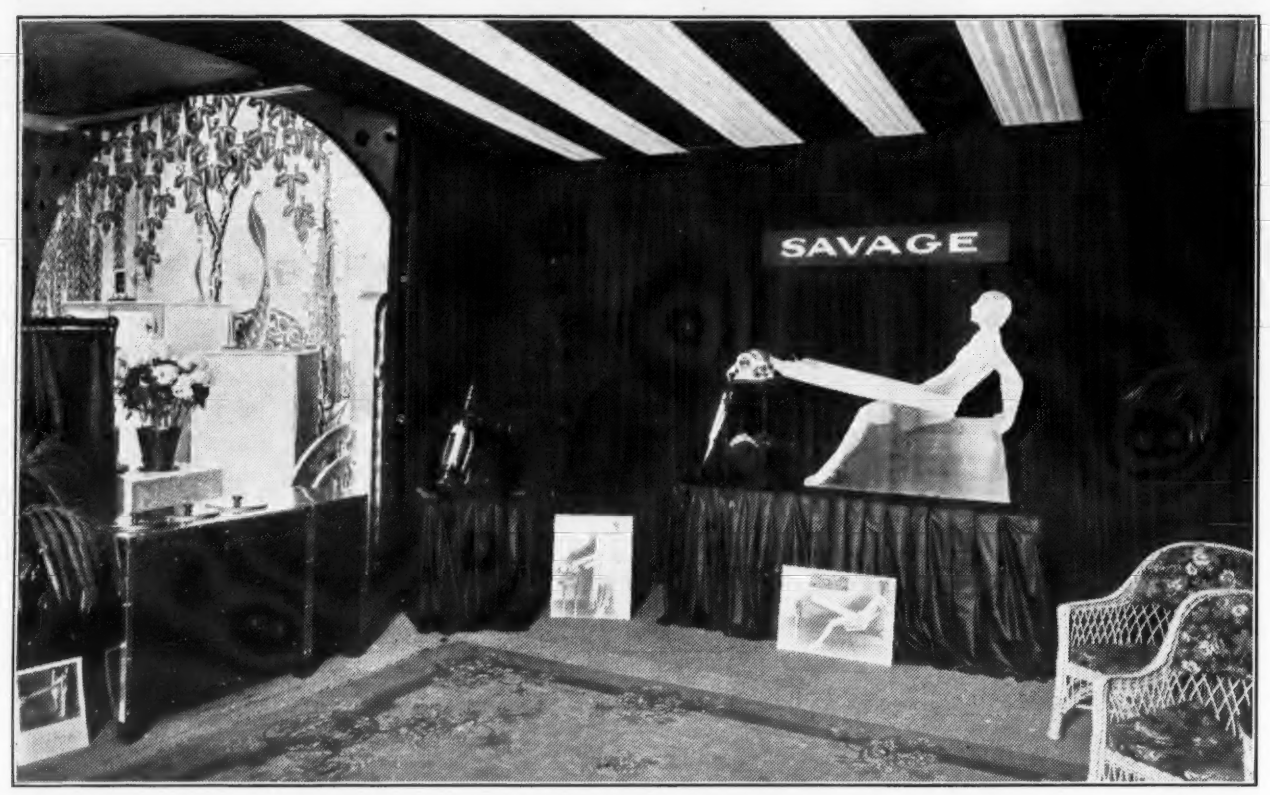
THE SPARKLET SYPHON also makes sparkling waters and mixed charged drinks. And only..... $7.50 complete

SPARKLETS, INC.

Convention Headquarters
Strand Hotel
Pennsylvania Ave. & Boardwalk
'Phone Marine 6040—Extension 504

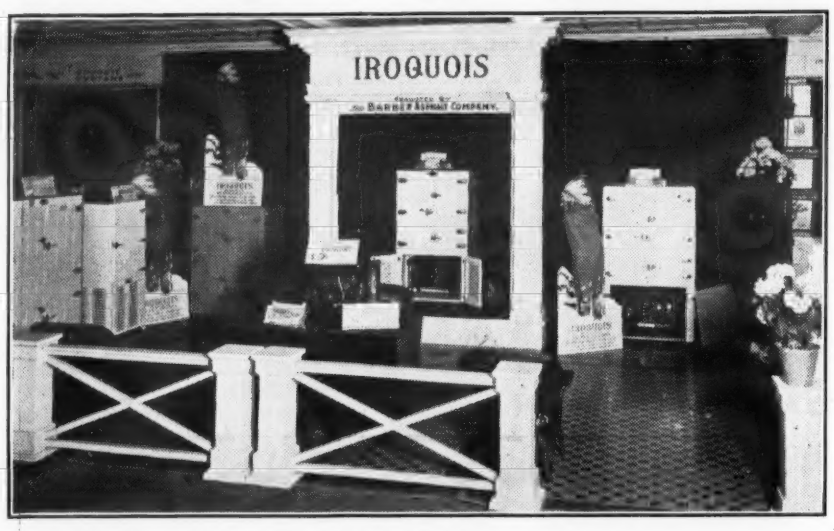
Executive Offices
19-25 WEST 44th STREET
NEW YORK

Savage Ice Cream Cabinet Vies With Life-Like Health-Motor Model



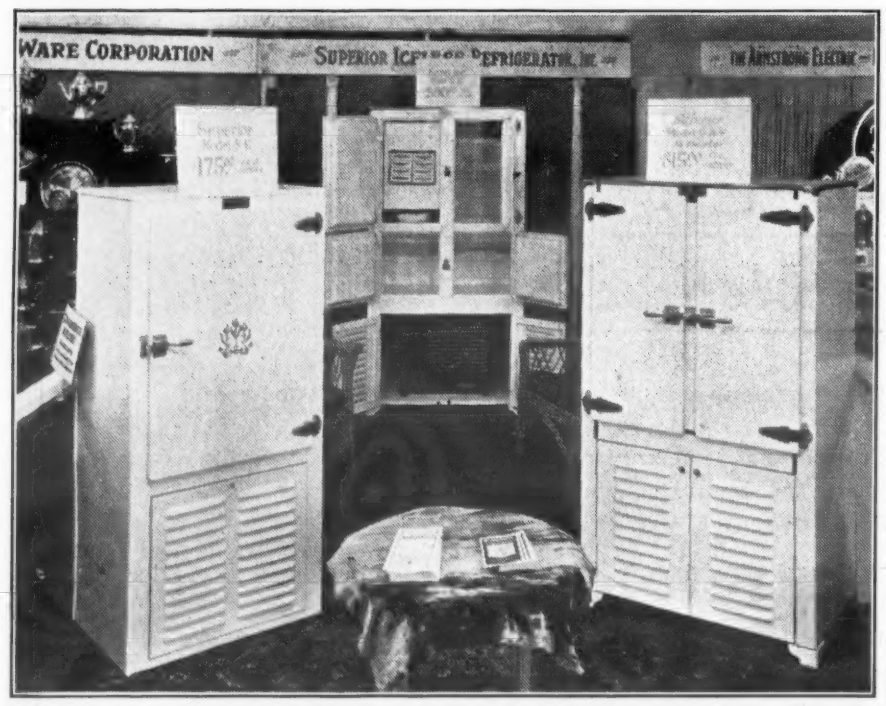
Cross-Section Model of Mercury-Type Compressor Shown in Conjunction with the Savage Ice Cream Cabinet.

Barber Asphalt Stages Iroquois Unit



A Complete Line of Household Machines Presented by the Iroquois Refrigerator Co., Subsidiary of the Barber Asphalt Co.

Domestic Models in Superior Booth



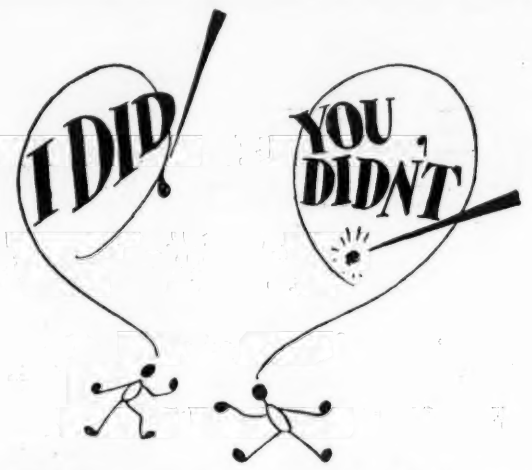
Three Sizes of Electric Machines Are Displayed by Superior Iceless Refrigerator, Inc., of Canton, Ohio.

(*Continued from Page 3, Column 3*)
of the showing are T. K. Quinn, P. B. Zimmerman, W. J. Daily, H. C. Mealey, C. E. Roesch, J. J. Donovan, W. M. Timmerman, H. H. Bosworth, W. E. Landmesser, A. R. Stevenson, Jr., C. Steenstrup, J. L. Knight, and J. I. Walker.

The Welsbach exhibit adjoins the General-Electric exhibit and is at the extreme right side of the Pier, in spaces 617 and 619, which are located very far back. However, the variety and scope of the Welsbach showing makes it well worth attention. There is an array of complete domestic models and commercial assemblies, including a Reol show case, three drinking fountains, one being a K-system Filtrine model and 2 Ebco self-contained designs, an Esco milk-can cooler, and a Ridgway cooler. The great feature of the Welsbach exhibit is the compressor unit, which is disassembled and assembled at 11 a. m. daily, to make clear the practical quality of the Welsbach design. Practically the entire executive force of the Welsbach Company is present from Gloucester City, N. J., including Sidney Mason, Townsend Stites, Howard R. Lukens, Roger R. Thompson, Wm. R. M. Very, F. W. Wegener, Reinhold Fernbach, R. D. Lombard, C. B. Ryan, Jr., Rai Havens, John S. MacCay, John C. Gaines, A. P. Merchant, L. A. Coons, D. R. Shiveley, Austin Monty and R. MacDonald.

The Iroquois Electric Refrigeration Company, of Philadelphia, have a display of a domestic model illuminated by concealed lights in a special case which gives a very attractive effect. Other domestic cabinets of Iroquois units in Bohn refrigerator models and two compressor units are on display. Attending the arrangement of these pieces in spaces 114, 116 and 118 are W. F. Worrell, W. F. Hartzell, F. A. Browne, E. L. Barnes, V. C. Kylberg, R. J. Willis and W. T. Poulterer, of the Iroquois organization. This exhibit is quite prominently displayed near the front of the entire exhibition, and is the first to be reached.

Savory, Inc., has an excellent showing
(*Concluded on Page 21, Column 2*)



One mfr. claims great results of **TESTS**---- but doesn't specify an authoritative test source.

Another mfr. claims great economy of operation---- ---but doesn't clinch it with **authoritative** test data.

So many business scraps *(a big one recently in the refrigeration field)* are based on ***claims***.

and so ad-nauseam

If tests are made by an unbiased authority---- -- the chances for misunderstanding are very much reduced

Know— by Test

Electrical Testing Laboratories
80th Street and East End Ave.
New York N.Y.

Kelvinator

is the oldest domestic electric refrigerator. The first Kelvinator ever installed (1915) is "still giving wonderful service." Kelvinator Corporation, Detroit, Michigan; Kelvinator of Canada, Limited, London, Ontario; Kelvinator, Limited, London, England.

Should Salesmen's Territories Be Zoned or Left Wide Open?

Dealer Takes Down the Bars and Tells His Salesmen to Work the Classes or the Masses as They Wish

By Willis H. Parker

THE dealer in electric refrigerators frequently is confronted with the problem of an equitable division of city territories when he has four or five salesmen on his staff. The question arises, "Should the territories be definitely bounded or should there be no restriction upon where the salesmen may work?"

One dealer has recently adopted the unrestricted territory plan after following the closed territory plan for a number of years. It will be an experiment with him, he admits, but the reasons appear logical. Since it is an experiment, he prefers to remain anonymous but has no objection to a divulgence of his reasons.

"I have had four men on domestic refrigeration," he explained. "They all felt that electric refrigeration was a class piece of merchandise; an article that could be sold only to the classes and not to the masses. For that reason each of them wanted to work the high class residence districts of the city. Since these disricts were situated in four sections of the town, and were of four grades of exclusiveness, an equitable division of the city was difficult.

Difficult To Zone Fairly

"To illustrate, let us suppose that the richest people of the community reside in a small section on the outskirts of the northside. On the eastside is another high class residence district—not so wealthy but still able to buy electric refrigerators. On the southside and near the city limits is another high class residence district, still a little lower in financial status than the other two. A fourth district lies on the west side of the city. The above exposition is clearly hypothetical, but illustrates the situation. To make an equitable division of the city, it was necessary to give each one of the four salesmen a fourth of each of the four districts, then throw to him a fourth of the remainder of the city—the sections where the so-called masses reside.

"Salesman 'A,' having a prospect on the northside, another on the westside, another on the southside and a fourth on the eastside, lost a lot of time jumping from one side of the city to another to see his prospects and work them as he should. I found that the boys were spending a good share of their working hours 'travelling.' And, in their travelling they were passing right through the districts wherein the masses reside.

Salesman Prefers the Masses

"Not long ago, I put on a new salesman, not that I intended to do so, but he sold himself to me upon a new proposition. It was that he didn't want any of the high class residence districts in his territory; he wanted the masses. So convincing was his argument that I began to feel that we had overlooked a field that would yield far more business than we ever could expect from the classes.

"In two weeks time, he uncovered more hot prospects among the masses than the four other salesmen had uncovered among the classes. Right now he is beginning to close, and the indications are that he'll make some of the bunch feel mighty sick when he gets through.

"Therefore, I determined that our main endeavor should be to get business, and not argue with the salesmen about territories. The bars are down; the salesmen can go where they please in quest of prospects. We shall permit the salesmen to exercise their temperamental qualifications, assuming that some men are better qualified to talk to the wealthy people, others to the middle classes, others to the masses. They will not be treading upon each others' toes for the man who is qualified temperamentally to talk with the rich will not bother with the middle classes or the masses. The man who prefers to talk to the masses will not bother with the wealthy people. Instead of having four men endeavoring to cover exactly the same kinds of territories, we will have four men covering four classes or strata of humanity.

"What is this salesman's argument? This man who wanted to deal only with the masses? That's a story in itself.

Says Working Man is More Interested In Food Than Rich Man

"He declares that the working man is more interested in what he eats than is the rich man. Therefore he should be more interested in the proper preservation of food. Taking a financial rating as a criterion, he declares that 98 per cent of the meals eaten by the man who makes from $1,800 to $2,500 a year are eaten at home. The rich man eats many of his meals at the hotel or the restaurant. He may not be particularly cognizant of how his food is prepared or served or preserved before serving. He eats because it is proper that he should eat, and not because he loves good food. In fact, the rich man does not need proper refrigeration of the food products in his home as the poor man does for, if all of the food in the rich man's home spoils, he can go to a restaurant or hotel for his supper. But, if the food in the poor man's home spoils, it is a calamity. Therefore it is vitally necessary for the poor man to preserve his food.

"The poor man often buys in quantities to get a better price, therefore he runs a risk of losing some of it if he doesn't have the proper facilities for caring for it after he has purchased it.

"You can arouse the interest and gain the attention of the man whose yearly remuneration is under $2500 easier than you can the attention of the rich man in the question of good food, plenty of food and well preserved food. When you mention a better means of conserving his pantry contents, the poor man is willing to listen attentively to your story; is anxious to have a machine placed in his home on demonstration; will watch the results of the demonstration closely to ascertain the truth of your assertions. In other words, he will sell himself on electric refrigeration, and if he can finance it, he will buy.

"Installment terms are such that any man making a salary of from $1,800 to $2,500 can finance the purchase, and goodness knows there are far more families in that salary class than there are above that figure."

A NEW WAY TO MAKE HOME ICE CREAM EASILY IN ICE-CUBE TRAYS

The Sparklets, Inc., New York, manufacturers of Sparklet syphon bottles, have devised a new means of making ice cream without stirring, at home, and easily. Ingredients are mixed according to an easy receipe and placed in liquid form in a Sparklets bottle, charged with carbon dioxide, aerated by shaking, and poured into cube compartments of the electric refrigerator for freezing.

Walter Dailey, sales promotion manager of General Electric at Cleveland, recommends the method as a means of increasing the desirability of electric refrigeration for home service, and especially as a newly-discovered means of replacing the hand freezer and trouble incident to old-style ice-cream production methods.

E. W. Brewer Made Director of Lamson Sales Promotion and Advertising

The Lamson Co., Inc., Syracuse, N. Y., announces the appointment of Emerson W. Brewer as director of sales promotion and advertising. Mr. Brewer for the last two years has been advertising manager for the company and was formerly with the H. W. Kastor & Sons Co., Inc., Chicago.

Williams Oil-O-Matic Appoints Roche Agency

The Roche Advertising Co., Chicago, Ill., has been appointed by the Williams Oil-O-Matic Heating Corp., Bloomington, Ill., manufacturers of oil burners and Ice-O-Matic electric refrigerators to direct its advertising account. Plans call for the use of newspaper, magazine, outdoor, business publications and radio advertising.

THE LIGHTEST
THE MOST EFFICIENT
THE MOST PERMANENT INSULATION
DRY-ZERO
(REGISTERED TRADE MARK)
BLANKET PLIABLE SLAB
(PATENTS AND PATS. APPD. FOR)
QUICK APPLICATION
PERFECT SEAL

Occasionally one hears about a material being "perfect insulation" for a Refrigerator—

There is No Such Thing As "PERFECT INSULATION"

But Dry-Zero, economic, scientifically correct and—above all things—*practical*, most nearly approaches it and has proven a long step forward in the building of *good* Refrigerators:

From U. S. Bureau of Standards and proved in actual experience			Heat penetration per Hr. Per Sq. Ft. per 1", per 1°F diff.
Dry-Zero			.24 BTU
Corkboard	.30	Average	.337 BTU
Pulpboards (light)	.33		
Mineral Wool Slab	.37		

DRY-ZERO CORPORATION 130 N. WELLS ST. CHICAGO

Please send details and literature on Dry-Zero. (I)
Name Address
City State

MORE THAN 4,500,000 CIRCULATION

No Wonder

Monel Metal National Advertising is helping to sell Monel Metal products . . . . . .

INDUSTRY HAS ADOPTED MONEL METAL
Cooler
Yum-Yum! There's more Zip in Beverages served from a Monel Metal topped cooler
MONEL METAL

This advertisement which appeared in recent issues of The Saturday Evening Post and The Literary Digest emphasizes to millions of buyers the cleanliness and long life of Monel Metal trim for kitchen equipment.

SINCE Monel Metal must be fabricated into definite forms before it can be sold to the consumer-market, Monel Metal national advertising very logically features products made of Monel Metal.

Through dominant advertisements addressed to the readers of the largest magazines in their respective fields, Monel Metal is establishing itself as a quality product by identifying itself with other quality products.

Indirectly, this advertising is also pointing out that a Monel Metal trimmed refrigerator is built to last since it would not be sound manufacturing practice to use long-wearing Monel Metal trim on a short-lived cabinet.

Thus, Monel Metal refrigerator trim becomes a very tangible, valuable selling point for manufacturer, dealer and salesman. Are you making the most of it?

SEND FOR "LIST B" OF MONEL METAL AND NICKEL LITERATURE

Monel Metal is a technically controlled Nickel-Copper alloy of high Nickel content. It is mined, smelted, refined, rolled and marketed solely by The International Nickel Company. The name "Monel Metal" is a registered trade mark.

MONEL METAL

THE INTERNATIONAL NICKEL COMPANY (INC.) MONEL METAL 67 WALL STREET, NEW YORK, N. Y.

YOU CAN'T AFFORD TO OVERLOOK THIS CONTROL!

The Surfaceswitch
List Price $12.00

THE Domestic Electric Refrigerator rises in public favor as it establishes its ability to give trouble proof service. Its volume of sales is inseparably bound up in its selling price and that, in turn, in its cost.

Thus dependability and cost are basic factors in the selection of the parts *and particularly the automatic control.*

The Con-Tac-Tor Surfaceswitch has been developed on these lines. If you haven't tried it out you are overlooking an opportunity to enhance the reputation of your Refrigerator and at the same time lower your costs.

ABSOLUTE CON-TAC-TOR CORPORATION
ELKHART, INDIANA

CENTRAL ARIZONA LT. & PR. GETS RESULTS BY PRIZE CONTEST

Secure 800 Essays on Advantages of Electric Refrigeration

Central Arizona Light & Power Co., operating on Phoenix, Chandler, Gilbert and Buckeye to 14,000 wired homes in territory with 60,000 population, reports:

1927 sales by central-station company

Make	Total
Servel	100
General Electric (5 Mo.)	29

1928 expected sales by central-station company

Servel	21
General Electric	300

1927 independent dealer sales

Frigidaire	85
Kelvinator	30
Others	6

1928 expected sales by independent dealers

Frigidaire	50
Kelvinator	20

making an expected grand total for 1928 installations of 391 household machines against 250 units in the same territory in 1927.

The central station company expects to attain this increase in sales by the continuation of sales and advertising methods discussed later in this article.

While the independent dealers are advertising to the extent of about 5% of their gross volume of business, partly paid for by manufacturers, the Arizona Light & Power Co. has in the first 4 months of 1928 spent approximately $1575.83 against $2102.21 to cover all 1927. Since August, 1927, however, this company has been conducting a continuous sales campaign, under the direction of J. S. Arnold, publicity and promotion executive of the company.

At this time, a consistent educational campaign on the advantages of electric refrigeration was commenced. A local newspaper cooking school has a General Electric refrigerator placed on the stage, and put into service by the domestic science instructor. It was featured in the specific booth belonging to the Arizona Light & Power Co., and furnished on one day chilled desserts to 1600 housewives. At various intervals the company has a similar "refrigerator dessert day" for the public at the company offices, 3rd Ave. and Washington St., Phoenix, when desserts are furnished without charge at lunch time to all-comers, meanwhile exhibiting the refrigerator in their window displays continuously.

Two essay contests were held, one for the public and one for high school pupils. The public contest was in essays on "The Advantages of Electric Refrigeration," with entries dependent upon contestants first calling at showrooms, seeing the refrigerator, signing cards of entry, and receiving a talk on the points embodied in the refrigerator, which points were also covered in material taken home by the contestant, over 800 essays being entered. These were judged by three prominent community members, and the prize, a $325 General Electric refrigerator, awarded the winner, with $15 Hot-Point waffle irons for second and third prizes and an $11 Everhot cooker as fourth award. Kitty Coleman became owner of the refrigerator through her essay, "A Gay Experience." The high school contest was conducted along different lines, four hundred students attending the company's offices in a body for a demonstration and lecture, being served at the same time with frozen desserts from the refrigerator. The prizes for the high school essays were in cash. The two contests, newspaper publicity, prizes, etc., cost about $500, creating 1300 prospects in the territory.

The refrigerator sales are constantly increasing, with encouraging reports of the effective education and acceptance of the new refrigeration by the public. Sales in the first 4 months of 1928 nearly equal sales made in all 1927.

At present, a model home in Medlock Place, on North Central Ave., Phoenix, done in Spanish style, with white painted brick and tiled roof, has a white-painted kitchen with unusual cupboard space, built-in ironing board, electric range and a General Electric refrigerator, among other equipment. This is visited by thousands of prospective builders in this section of Phoenix, and represents the finest and most comfortable appropriate living environment for Phoenix climatic conditions. No better strategic location could exist for a refrigerator display.

The prize-winning essay follows:

"A Gay Experience"

By Kitty Coleman

"'Gleaming Elegance,' I said to myself, the minute I spied the General Electric refrigerator. 'Here is the Gloom Eradicator for you in ice boxes, my lady. You must have one.

"'And why not,' I continued to myself, Growing Excited as I looked it over.

"'This Glistening Enamel intrigues me. And the way this machine Governs Electricity and Gores Expenses Gloriously Elates me.

"'All Guesswork is Eliminated! No more Ice Cards! No more Drip Pans! No more damp drains! No more oiling! No more belts or fans! I Grow Eloquent over so many no-mores.

"'Think of all the calories and vitamines I can keep so temptingly fresh and pure for days within that Glossy Elegance! I see my family Gobbling Eagerly foods that Give Enjoyment and Guarantee Exhilaration to fagged appetites.

"'I'd Gladly Entertain more if this Glittering Efficient servant were mine,' I opined, as I noted its temperature of 45 degrees.

"'Salads, bouillons, iced desserts, everything served from its shelves, would be Glowingly Enthused over.'

"'Costs too much,' said the creature at my side.

"'Goofy Excuses!' I protested. 'IT COSTS LESS IN THE LONG RUN. This is a Genuinely Economical machine. Its motor is only one-eighth the power of a Galloping Equine.'

"As I finished my Gratifying Examination, I gave this piece of Glistening Equipment a loving pat, and whispered in its ear:

"'Oh, Glorious Expiation for the sins of past refrigeration, how can I have thee?'

"Grinning Eagerly, for she smelled a sale, the salesgirl who heard me said, 'Terms Generously Easy.'

"Amid Grateful Ejaculations the deal was closed.

"'Atta girl!' beamed Gallant Esposo (Span., "husband") as he saw my buy.

"'Good Eye for value! When do we Gleefully Eat."

HARTFORD ELECTRIC LIGHT ESTIMATES 1928 SALES WILL TOTAL 2360

Hartford Electric Light Co., Hartford, Conn., operating in Hartford, West Hartford, East Hartford, Wethersfield, Rocky Hill., Tariffville, Granby and Windsor, a population of 175,000 with 52,000 wired homes, reports the status of electric refrigeration in the territory:

1927 sales by central station company

Make	Domestic	Commercial	Total Units
Frigidaire	165	47	212

1928 estimated sales by central station company

Frigidaire	560	none	560

Estimated sales by independent dealers

	1927	1928
General Electric, Frigidaire, Wayne, Iceberg, Kelvinator, Copeland, Iroquois	1000	1800

Frigidaire commercial sales are handled by the manufacturer's own branch, with the central station focussing on domestic units. Hartford Electric will use the N. E. L. A. plan with slight changes, and spend $4800 in advertising against $3084 in 1927. Dealer advertising is estimated increased from $3000 in 1927 to $4000 in 1928. A total increase from 1212 units in 1927 to 2360 units is estimated for 1928.

ATLANTA GA. MAN ROLLS G. E. MACHINE THROUGH TOWN TO PAY HIS BET

As general manager of the electric refrigeration department of the Alexander-Seewald Co., Atlanta, Ga., distributors of General Electric refrigerators, E. V. Dunbar had certain convictions. In a luckless moment he wagered with the retail sales manager, Roy Smith, that the retail sales force would not sell fifty General Electric refrigerators in a given time. It was agreed as a penalty the loser was to trundle a refrigerator through town.

When the sales were checked, it was found that Mr. Smith's men had sold not fifty—but sixty-one refrigerators!

Mr. Dunbar then learned the worst, which was again the best, and he began his trip to town pushing an apartment house model. No sympathy was expressed by the victorious Mr. Smith and his crew. Instead, they packed into several autos and followed the perspiring loser and honked vigorously if he lagged. Signs telling of their victory decorated the cars to make sure that the public would know to whom belonged the spoils.

Harmonious Effect in Central Station Window

Toledo Edison Window Display, May 14, 1928. Beautiful display of Frigidaire units in the Electric Store of Toledo Edison Co., Toledo, O. This company and its subsidiaries plan to sell 2645 units in their territory during 1928, as against 2368 units in 1927.

Radio Talks on Servantless Home at Bound Brook, N. J., Excites Wide Interest

The electric "Servantless Home of Tomorrow" at Bound Brook, N. J., designed by T. W. Price, was the subject of a radio address by Miss Ada Bessie Swann, home economics director, and Miss Helen Hardy, assistant to the general lighting representative of Public Service Electric and Gas Co., Newark, N. J., which took place early in March. On March 25 one thousand people inspected the home, 500 during that week, 1400 on April 1 and 250 on April 2. coming from all over New Jersey, Philadelphia, and Long Island. Visitors registered from Vermont, Massachusetts, Canada, and England.

Kentucky Utilities Opens Store at Clinton, Ky.

Kentucky Utilities Co. opened a new store at Clinton, Ky., (1,455 pop.) April 25, with talks by L. W. McClellen, commercial manager, and E. C. Hardesty, manager at Fulton, Ky., office. Prizes and souvenirs were given to visitors.

TOLEDO EDISON EXPECTS 2645 FRIGIDAIRE SALES IN TERRITORY FOR 1928

Aim to Exceed High Record Set Last Year

Electric refrigerator sales during 1927 by the Toledo Edison Co., were as follows:

1927 sales by central station company

Make	household	commercial	total
Frigidaire	1898	364	2262
York-Ohio		35	35

Plans are under way to increase markedly the refrigerator turnover during 1928. Advertising expenditures will be increased from $12,720 (1927) to $13,000.

1928 estimated sales by central station company

Make	household	commercial	total
Frigidaire	2100	500	2600
York-Ohio		45	45

Independent dealers are an important influence in Toledo Edison territory. Sales are estimated as follows:

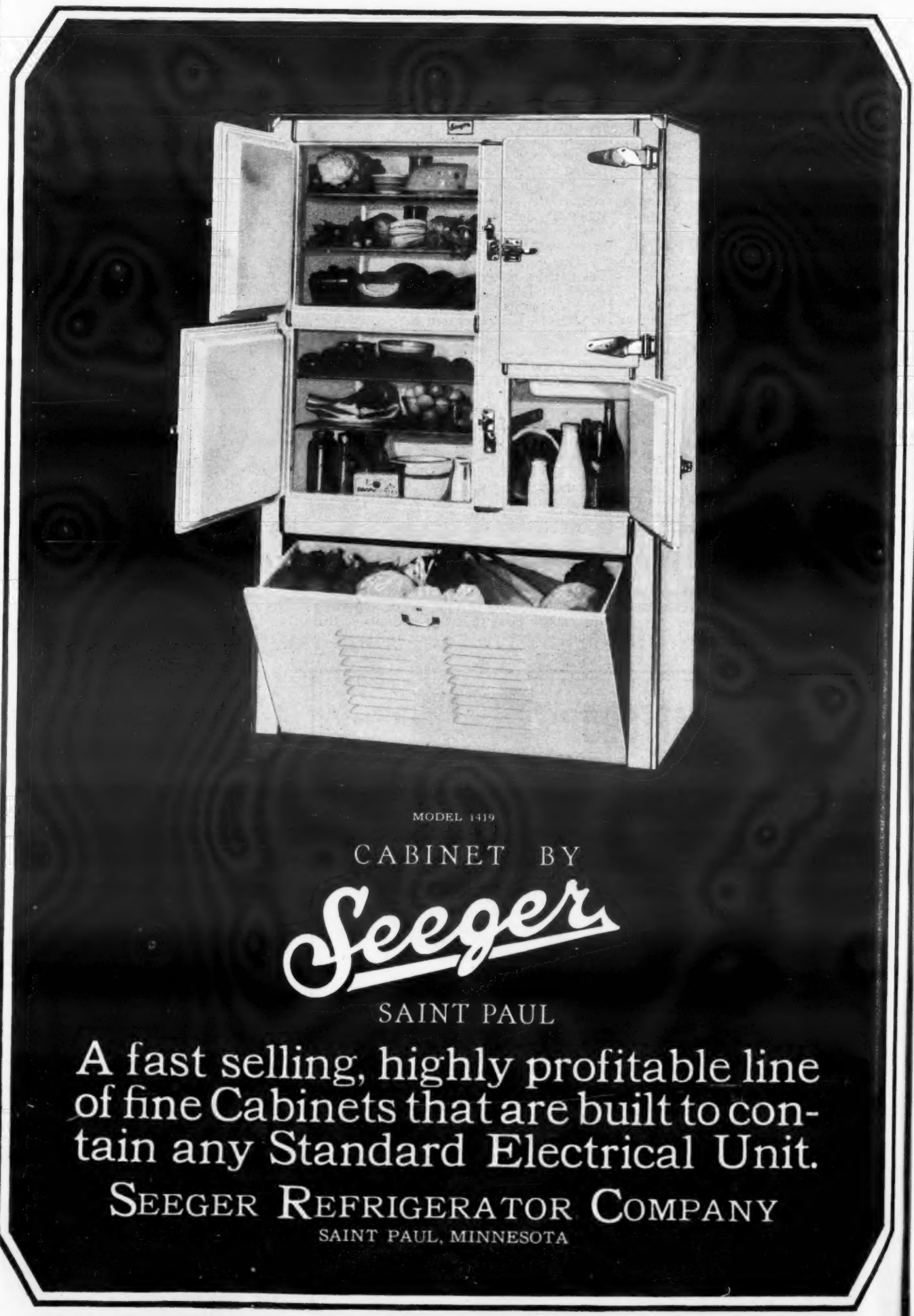
1927 independent dealer sales

Make	household	total
General Electric	75	75
Norge	15	15
Kelvinator	75	75

1928 expected sales by independent dealers

General Electric	250	250
Norge	75	75
Kelvinator	150	150

The combined report indicated a grand total of 3120 units quoted for 1928 in this territory of 75,600 wired homes and 350,000 population. So far as is known, dealers will spend this year $10,000 in advertising, giving $23,000 total advertising expenditure in the district.


MODEL 1419
CABINET BY
Seeger
SAINT PAUL
A fast selling, highly profitable line of fine Cabinets that are built to contain any Standard Electrical Unit.
SEEGER REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

Fear of Electric Refrigeration Spurs Ice Industry to Adopt Better Merchandising Methods

Ice Men Discuss Machine Menace at Association Meetings; Industry Imbued with New Ideas

THE growth of electric refrigeration has caused the ice industry to take in hand ways and means to preserve its volume of trade, and considerable frank discussion has been current. The resulting benefits and improvements have been marked.

Leslie Smith, secretary of the National Association, at the Centralia, Wash., Convention of the Northwest Association of Ice Industries, furnished a high-light on the newer practice when he said in the course of his address of February 20:

"Five years ago, when we began to talk about ice men selling refrigerators, his cry was, we don't want better boxes, the poor ones use more ice. That was the flowering of the seed of conceit and self-sufficiency which had attended his past history. In 1927 there were 622 ice companies selling refrigerators to their customers. We have no right to expect to command the confidence of the women of America in the use of ice unless they can get out of that agency the proper return, and that proper return is manifested in the quality of the box into which you ice men put your product. There must be no such thing as a dissatisfied ice customer."

Certain of the ice companies have taken up the sale of ice cubes to restaurants, etc., and even making special deliveries to homes by motorcycle, in an effort to retain ice patronage, although such companies claim that there is no money in the sale of cubes. Schools for ice men have also been established with training of delivery men, and the teaching to them of standard principles of merchandising. Spring season work in some companies is carried on in the form of careful inspection and repair or replacement of all refrigerators served, in order that they may give good service under ice supply; this is a means of selling new refrigerators, where required, and a source of some revenue. Group activities are also encouraged through work with architects and builders looking to the installation of built-in ice boxes, with outside icing facilities. The industry is also contemplating an educational campaign on the use of ice in refrigeration, in schools, colleges and homes.

The Gospel of Better Service

John Borsky, secretary of the Ice Publicity Association of Allegheny County, Penna., at the convention of the Pennsylvania Ice Producers' Association, held in York, on March 27, said in part, in describing the work of his organization which was to sell the idea of "ice" by billboard and newspaper to the public:

"Ice has never changed, nor ever will as far as reliability is concerned. . . . The electric refrigerator manufacturers started propaganda. This would also be classed as advertising, but some of it would come under the heading known as unethical advertising. However, the ice industry did not mind. . . . We have a weapon in our power, a form of indirect advertising. We have rendered good service in the past, we are rendering better service in the present, let us render excellent service in the future. . . . 'Service' is one of our most poignant advertising devices.

"Our advertising in Allegheny County has proved very successful. We feel that the industry has graduated from the old-style 'ice business' and resolved itself into the business known as 'refrigeration.' We have the electric refrigerator manufacturer to thank in a certain sense. He started us on our 'long trek' toward the success we are realizing. But we have only just begun.

"We put out 100,000 'Ask him' pamphlets through the courtesy of James Cullen, of the City Ice & Fuel Co. of Cincinnati, Ohio, to whom we are very much indebted for the good they brought. They made the people who received them think of their old stand-by 'ice,' as a good and economical service in the household.

"At the present time we (the Ice Publicity Association of Allegheny County) are planning a series of lectures to be given to the public. Our very able lecturer will give talks before such audiences as women's clubs, civic bodies, schools, drivers and dealers, who earn their living in the ice business. The manufacturers, delivery men, and the dealers, are doing all they can to help improve the service of their respective companies. New plans are being worked out in this direction. Some of the companies are going to have their employees uniformed. The canvas ice-carrying bag is fast coming into use, also the canvas rug, which the delivery man places on the floor to avoid soiling. All these things are, step by step, carrying us more nearly and surely to our goal. . . . We are also giving thought to the use of radio advertising, by giving a series of health talks in a way that will be interesting to all."

Public Is Now Refrigeration Conscious

While this speech of Mr. Borsky's represents one aspect of the ice industry's attitude towards the electric refrigerator, there are other angles. At the South Jersey Ice Manufacturers Convention in Camden, N. J., April 11, Samuel Freer, of the Ice Publicity Association of Philadelphia and vicinity claimed:

"The small machine (electric) had really helped the ice men by the advertising put forth by the manufacturers of mechanical units, and the public has, to a great extent, been made refrigeration conscious," which remarks he followed by reading a number of suggestions to their delivery men, as put out by the Union Ice Company of San Francisco, which stressed the importance of honesty, cleanness and courtesy in the delivery of ice.

Selling More Ice Than Ever Before

Harry Bailey, regional vice-president of the Eastern Division of the National Association of Ice Industries, in speaking of mechanical refrigeration, said at the same Convention:

"For these reasons (certain modern delivery practices just listed) I can't see why the iceman of today, with the growth of the territory in which he is doing business, should be pessimistic over the outcome of the electric unit. As a matter of fact, one man I was talking to in the past week told me that in a suburban town where his company was hit the hardest by mechanical refrigeration of all kinds, they were selling more ice today and had almost twice as many customers as they had when electric machines started. So, regarding this subject, I would advocate that the dealer do not worry about what the electric refrigerator is doing, that he give the public what it pays for, when it wants it, and as it should have it."

Edward L. Bennett, in speaking at the Thirtieth Annual Convention of the Massachusetts Ice Dealers' Association, at Springfield, Mass., on April 5, assumed a somewhat similar attitude to Mr. Bailey:

"The mechanical unit, instead of darkening the sky and blotting out the ice industry, has created a condition in which enthusiasm concerning the future of the industry is greater now than at any previous time. We are beginning to realize for the first time that we can merchandise ice, that it is possible for us to go out and develop our business two fold, and probably three fold, during the next ten years, if only we adopt modern, up-to-date business principles of merchandising. . . . . The biggest strides I can see in the last year are being made in merchandising."

Wesley M. Oler, Jr., vice-president of the American Ice Company, in speaking on "Merchandising Ice" on the following day, said:

"The electric refrigeration people seem to boast about the fact, take some pride in the fact, that they have forced us in the ice industry into advertising. Sure, they have. We take off our hats to them for it. We are glad they have done it. They have done more than that, a whole lot more than forcing us to advertise. They are waking us up. The sins of the ice industry haven't been the sins of commission so much as they have been the sins of omission. . . . Let us go forward with this work of educating the public; it is very, very important. Let us do it in our own local bailiwick; let us support the work of the National Association. As we go on ourselves about our business, don't let us for a moment let the old scarecrow come walking into our office with a sheet over his head, and go boo, and tell us the electric refrigeration is going to put the ice man out of business. . . . We know that we are connected with an industry that is supplying a real, personal service . . . a prosperous one that is going to continue to be prosperous."

Frank C. Dwyer, who followed Mr. Oler, in talking on "Sales Methods," was of the opinion that:

" . . . the possibilities of the sales of ice are so great that unless we wake up to the fact that we really must merchandise ice, the small machine unit will make greater inroads than it already has. However, it is true that with every company the amount of good will that can be created by their delivery salesmen is very great. . . . We called on 3000 customers, and in almost every case we were successful in having the customer continue with us. . . . In every one of our companies we have installed a service that has given us splendid results in competing with the small machine. . . . It (repairing boxes of customers) brings our men in closer personal contact with customers, and that is something we must have —closer personal contact. The small machine unit has not made inroads that the statistics that have been published show. With our domestic customers it is a problem yet to be solved. Again, personal contact through our salesmen has turned out to be the most satisfactory method we have yet found. . . . We are holding training schools for our men to prepare them to render better service to the public. We are trying to educate them along sales lines, and discourage talking about the small mechanical unit. As soon as you get a group of men . . . talking about the small machine, it seeps down through your organization."

Leslie C. Smith, secretary of the National Association of Ice Industries, already quoted in this article, has this to say of the Trade Development service of the Association in a formal article on the work of the organization:

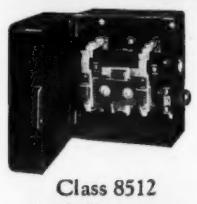
"The Trade Development service is just about swamping headquarters. Everybody seems to like the material, and to find it decidedly productive of good. As the season approaches, the demands increase. Since this work is carrying its own financial burden, we are not alarmed about it. But we do have serious concern over the other departments. Especially is this true of the National Publicity Campaign. To date, just about one-half of the $300,000 has been pledged. Already we have begun to curtail the advertisements. . . . No one seems to have the slightest word to say against the entire plan. On the contrary, everyone praises it highly. Yet the money is not forthcoming. The industry is making big money, but it is also keeping it. Seemingly, only disaster can induce ice men to spend in order to protect the future of the business."

The publicity campaign of which Mr. Smith speaks includes *Saturday Evening Post* and newspaper advertising, matrices, advertising series for use by ice companies and having the objective to "stimulate the consumption of more ice throughout the country." Refrigerator sales, with the cooperation of department stores, furniture and hardware dealers, are planned for as part of the general effort. A two-color, eight-page folder, "The Refrigerator Question Box," is made for quantity use by ice company members, and a periodical, "Ice Merchandising" is issued for the guidance and help of member companies in conducting local work.

There is much activity in the ice councils generally relative to mechanical refrigeration by domestic units. Recently William B. Johnson, general sales manager of the American Ice Company, spoke in Boston at the Algonquin Club during a dinner attended by bankers and ice men on the probable competition from electric refrigeration which could be expected in the future.

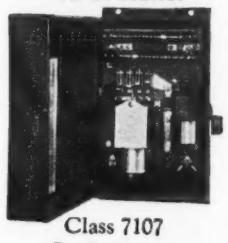
I-C Automatic Motor Control for REFRIGERATORS

THERE'S A CORRECT TYPE FOR EVERY INSTALLATION



Class 8512
A. C. Contactor

Class 8532
A. C. Startet



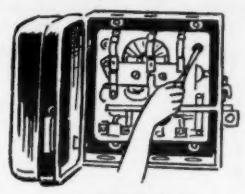
Class 7107
D. C. Starter

A standard feature of all I-C Control is the removable mechanism panel. This arrangement is greatly appreciated by the electrician as it facilitates wiring - - and all connections are accessible.

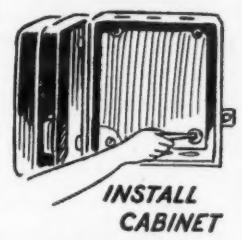
Overload protection can be provided where necessary and is arranged so that it can be reset without opening the enclosing cabinet.

For complete information write for catalog describing a complete line of contactors and A. C. or D. C. Automatic Starters

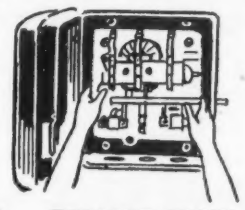
EASILY INSTALLED



LOSEN 3 SCREWS



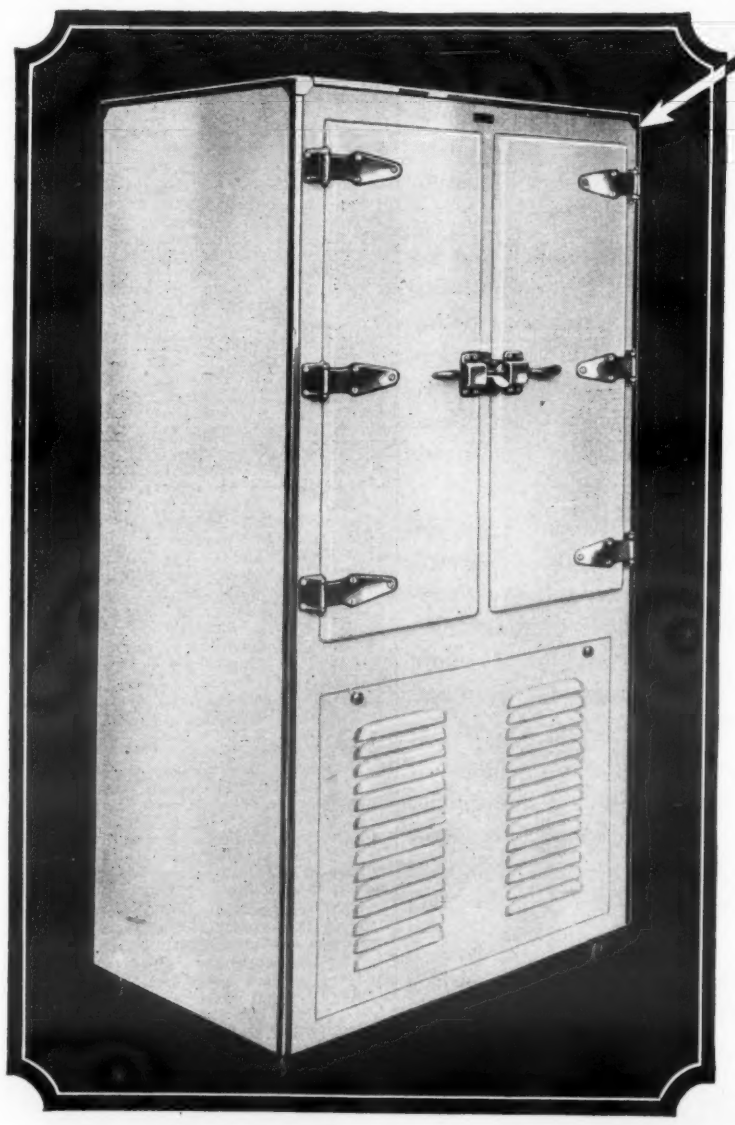
INSTALL CABINET

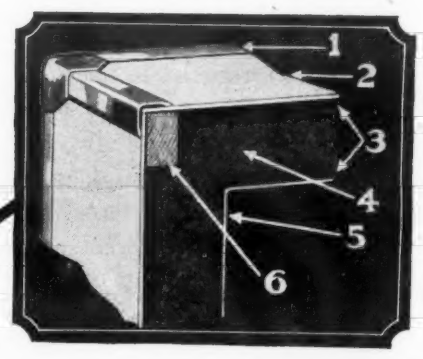


REPLACE PANEL AND MAKE CONNECTIONS

Industrial Controller Co.
MILWAUKEE, WIS. U.S.A.

A permanently Moisture-proof Refrigerator





Hermetically sealed corkboard insures perpetually dry insulation regardless of the length of service.

1.—Mirror finish Monel Metal trim.

2.—Porcelain or lacquer exterior steel sheets.

3.—1/8" Hydrolene between insulation, liner and outside sheets.

4.—Pure corkboard insulation.

5.—Porcelain inside liner.

6.—Moisture protected wood frame.

Hydrolene forced in under pressure

The 1/8" space between the insulation, liner and the outer steel sheets is filled with hydrolene forced in under pressure at 400 degrees of heat. This drives out all the free air, hermetically sealing the cork and insuring dry insulation indefinitely, and protects the outside sheets from corrosion.

Manufacturing facilities for a tremendous volume of business

The combined resources of three great companies are back of this long service cabinet: The Erie Art Metal Company, Erie, Pa., the Erie Metal Furniture Company, Erie, Pa. (under one management) and the Knox Products Company, Wilmington, Del.

Address

Erie Art Metal Co.
Erie Metal Furniture Co.
ERIE, PA.

Knox Products Company
WILMINGTON, DEL.

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Electric Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

BUSINESS NEWS PUBLISHING CO.

554 Maccabees Building, Woodward Avenue and Putnam Street
Detroit, Michigan. Telephones: Northway 4243-4244

Subscription Price
United States and Possessions: $1.50 per year; three years for $3.00.
All Other Countries: $1.75 per year; two years for $3.00.

F. M. COCKRELL, *Editor and Publisher*

H. A. DELASHMUTT, *Advertising Manager* BEULAH WERTZ, *Circulation Manager*
HUGH J. MOORE, *Assistant Editor* GEORGE N. CONGDON, *Business Manager*

Copyright 1928 by Business News Publishing Co.

JUNE 6, 1928

Production Figures

INCREASED self respect will be gained by the electric refrigeration industry when it arrives at the point of being willing to make available to the public monthly figures showing the total production of the principal types of equipment. The industry has already suffered the penalty of exaggerated claims by promoters. Self-interest will be served by the adoption of policies which reflect business stability and sincerity of purpose. Certainly the industry cannot hope to secure the complete confidence of intelligent investors so long as reliable evidence of the industry's condition is withheld.

Two agencies equipped to disseminate statistical information have offered their services to the electric refrigeration industry. The Electrical Equipment Division of the Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, at Washington, is ready and willing to set up the machinery for collecting monthly production figures from the manufacturers. This service is being rendered to many lines of business with numerous beneficial results. The spirit of helpfulness which prevades the Department of Commerce is well known to business men. The trustworthiness of this department of the government can scarcely be questioned.

If, however, anyone fears that future changes in administration may result in a departure from the well-established policy, another agency is available which is completely within the control of the manufacturers. The National Association of Electrical Manufacturers, which very recently extended a membership invitation to the electric refrigeration manufacturers, maintains an efficient arrangement for the compilation of production data. This service was pointed out as one of the numerous advantages of affiliating with the N. E. M. A.

Particular pains are taken to protect the interest of the individual manufacturer in the plan used by this Association. While the members are appraised of the production of different manufacturing units, the names of the companies reporting are not revealed. Totals only are made available to the public. The Association, in fact, is the means by which the Department of Commerce secures the production figures for a number of manufacturing groups in the electrical field.

The investing public has become accustomed to having regular and accurate reports reflecting current conditions in terms of factory output. The automobile industry, for example, has used production figures with telling effect in winning the enthusiastic support of investors. The real anxiety which prevaded the business world during the recent stoppage of Ford production, and the wave of relief which swept the country when operations were resumed, amounted to a phenomenon the like of which had never happened before.

Aside from the gain in public confidence, which would result from the elimination from suspicious practices, many practical benefits of accurate production statistics will accrue to the manufacturers themselves. Overproduction, one of the worst foes to profit, may be avoided in most cases by observing this barometer of market conditions. Millions of dollars might have been saved by the industry during the past few years if executives had been able to gauge the rate of development more accurately.

It is an interesting fact that industry statistics are the forerunner of simplification. Old industries have gone on for years making a multiplicity of sizes and types of products simply because it was thought necessary to do so in order to meet competition. A study of production figures usually shows that many items have little or no demand. Once this fact is realized it is an easy matter to eliminate the needless varieties.

Right now electric refrigeration manufacturers are confronted with a most troublesome problem due to the increasing number of types and sizes of equipment. As each manufacturer brings out a new unit, the others quickly follow to *meet competition*. As a result it is almost impossible to maintain production schedules so as to assure adequate stocks to meet each order. Carload shipments are continually being held up to await one or two odd units and these in turn are delayed because the supply of some part or accessory has been depleted.

This confusion in the factory is reflected all along the line to the salesman and the customer. Nothing so discourages a salesman as to find that his arduous efforts have been wasted because the particular unit wanted is "out of stock" and cannot be delivered for "30 days"—ample time for the customer to cool off without mechanical assistance.

The first and simplest step in clearing up the whole chain of evils is an immediate agreement upon some procedure which will enable the industry to take stock of its progress periodically and have some basis for judging its immediate future possibilities. There may have been good reasons for not doing so in the past, but now seems to be a good time to take the step.

OPPORTUNITIES FOR FOREIGN TRADE LISTED BY DEPT. OF COMMERCE

In forthcoming issues, ELECTRIC REFRIGERATION NEWS will publish under this heading, a list of announcements taken from a press service issued by the United States Department of Commerce, Bureau of Foreign and Domestic Commerce, Washington, D. C., and known as "What the World Wants." These listings contain markets for a large variety of products in which readers connected with manufacturing organizations may be interested.

Firms and individuals wishing to obtain further information on the announcements listed here should apply to any of the district or co-operative offices of the Bureau of Foreign and Domestic Commerce, located throughout the United States. These offices will be glad to give the enquirer confidential information which is not made public inasmuch as the department prefers to confine its distribution to American firms engaged in selling American goods. In referring to the announcements, the number which is given should be used.

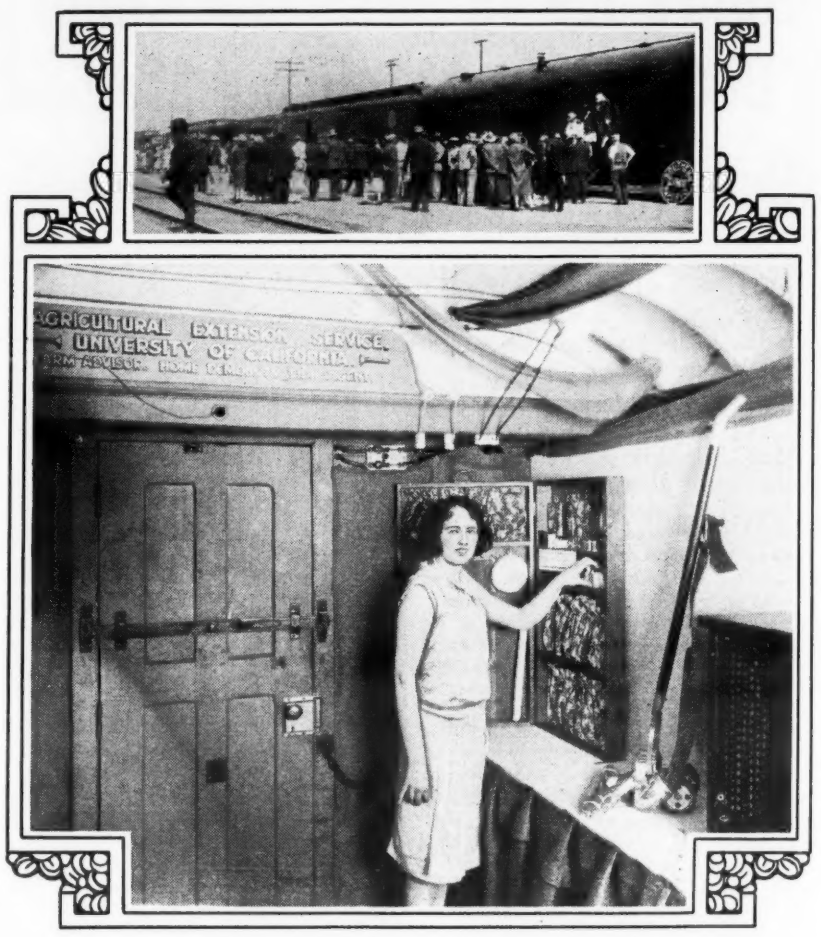
The list of district and co-operative offices of the Bureau of Foreign and Domestic Commerce is given here and is followed by announcements which have been selected from the press service.

The asterisks (*) indicate that the inquirer would act as both purchaser and agent.

AKRON—Chamber of Commerce.
ATLANTA—538 Post Office Bldg.
BALTIMORE—Export and Import Bureau Ass'n. of Commerce, 22 Light St.
BEAUMONT—Chamber of Commerce.
BIRMINGHAM—Chamber of Commerce.
BOSTON—1801—Customhouse.
BRIDGEPORT—Manufacturers Ass'n.
CHARLESTON, S. C.—Chamber of Commerce.
CHATTANOOGA—Southern Railway System.
CHICAGO—Room 834, 33 South Clark St.
CINCINNATI—Chamber of Commerce.
CLARKSBURG, W. VA.—Chamber of Commerce.
CLEVELAND—Chamber of Commerce.
COLUMBUS, GA.—Chamber of Commerce.
COLUMBUS, O.—Chamber of Commerce.
DALLAS—Chamber of Commerce.
DAYTON—Chamber of Commerce.
DES MOINES—121 Federal Bldg.
DETROIT—607 Free Press Bldg.
EL PASO—Chamber of Commerce.
ERIE, PA.—Chamber of Commerce.
FORT WORTH—Manufacturers' Ass'n.
GALVESTON—309 Post Office Bldg.
GREENSBORO—Chamber of Commerce.
HOUSTON—Chamber of Commerce.
INDIANAPOLIS—Chamber of Commerce.
JACKSONVILLE—308 Greenleaf-Crosby Bldg.
KANSAS CITY, MO.—Athletic Club Bldg.
KEOKUK—Chamber of Commerce.
LAKE CHARLES—Association of Commerce.
LOS ANGELES—1163 S. Broadway.
LOUISVILLE—Board of Trade Bldg.
LOWELL—Chamber of Commerce.
MEMPHIS—Chamber of Commerce Bldg.
MILWAUKEE—Ass'n. of Commerce.
MINNEAPOLIS—Federal Building.
MOBILE—317 Meaher Bldg.
NEWARK—Chamber of Commerce.
NEW ORLEANS—322 Post Office Bldg.
NEW YORK—734 Customhouse.
NOFOLK—406 E. Plume St.
ORANGE, TEX.—Chamber of Commerce.
PENSACOLA—Chamber of Commerce.
PITTSBURGH—Chamber of Commerce.
PHILADELPHIA—20 South Fifteenth St., Room 812.
PORT ARTHUR, TEX.—Chamber of Commerce.
PORTLAND, ORE.—Rm. 215, New P. O. Bldg.
PROVIDENCE—Chamber of Commerce.
RALEIGH, N. C.—Dept. of Conservation and Development.
RICHMOND—Chamber of Commerce.
ROCHESTER—Chamber of Commerce.
ROCKFORD—Chamber of Commerce.
ST. LOUIS—1201 Liberty Central Trust Co. Bldg.
SAN ANTONIO—Chamber of Commerce.
SAN DIEGO—Chamber of Commerce.
SAN FRANCISCO—310 Customhouse.
SEATTLE—820 Skinner Bldg.
SYRACUSE—Chamber of Commerce.
TACOMA—Chamber of Commerce.
TOLEDO—Chamber of Commerce.
TRENTON—Chamber of Commerce.
WICHITA—Chamber of Commerce.
WILMINGTON—Suite 13000, Due Pont Bldg
WORCESTER—Chamber of Commerce.

30573 Vending machines for preparing and serving ice cream, beverages and foods in public view. (Brazil)
*30555 Household electrical appliances. (Germany)
30518 Refrigerating unit and ice making equipment. (Mexico)
*30581 Paints and colors. (Netherlands)
*30502 Tin Plate. (Poland)
30558 Refrigeration units, electrical. (Spain)
30526 Household articles. (Argentina)
30579 Kitchen utensils, enameled table tops and washstand sets. (Porto Rico)
30450 Hardware specialties, kitchen. (Australia)
30450 Hospital ware and iceless cooling cabinets. (Australia)
30422 Paints and oils, pigments, dyes and varnishes. (Cuba)
30457 Refrigerators. (Denmark)
30365 Hardware (Door knobs, locks, butts, latches, chest handles, lifts, etc. cheap quality. (Egypt)
30365 Household and personal electrical equipment and wiring supplies. (Egypt)
30367 Hardware builders', especially locks. (Germany)
30376 Paints. (Mexico)
30444 Cork. (Switzerland)
*30645 Pigments, varnishes, lacquers and stains for shoes and leather goods. (Brazil)
*30672 Building materials such as material for roofing, flooring and insulations. (Denmark)
30674 Soda fountains. (Mexico)
30675 Soda fountains. (Mexico)
30674 Soda fountain machinery and equipment, including ice cream and fruit juice machines. (Mexico)
30675 Soda fountain machinery and equipment, including ice cream and fruit juice machines. (Mexico)
30674f. Soda fountain supplies. (Mexico)
30675f. Soda fountain supplies. (Mexico)
30625 Hardware. (Chile)
30668 Household electrical machines, especially refrigerators and washing machinery. (Italy)
30669 Electrical goods. (Philippine Islands)

Special Train Teaches Farm Wives to Enjoy Electrical Labor Savers



View of Southern Pacific "Agricultural Special" Train Exhibit of Modern Farm Practice, including Corner of Electric Kitchen.

The University of California Agricultural Extension Service, housed in a special fifteen-car train under sponsorship of the Southern Pacific Ry., carried a moving exhibition to farmers, orchardists, business men and farmers' wives in the San Joaquin and Sacramento valleys recently. At each stop, morning and afternoon programs were held, being showings of live stock with discussions, showings of products of interest to the farmer, and lectures on marketing products, farm diversification, and home economics, with an inspection of all train exhibits as a part of the proceedings. These were especially showings of poultry, swine, dairying and sheep-raising activities, with penned stock shown on the train. Two coaches of special interest to women were a car completely fitted with an ideal kitchen and electric devices, including refrigerator, range, toaster, etc., and a coach which served as a lecture hall. The train also carried a sleeper, diner, and generator-baggage car to furnish current for the train, which was under joint charge of Prof. B. H. Crockerton of the University of California and R. E. Kelly, director of development and colonization of the Southern Pacific, with live exhibits furnished from the University Farm School, Davis, where the trip commenced and ended. Electricity was advocated for the farm, nearly all the territory having available current supply.

30923 Refrigerator display counters, steel (Canada).
30901 Cellulose lacquers and materials (Colombia).
30908 Household electrical appliances, especially washing machines and mangles (Germany).
30905 Paints, good quality (Venezuela).
*30991 Soda Fountain (Brazil).
30950 Paint pigments, aluminum and varnish (France).
30947 Household electrical appliances (Dominican Republic).
30970 Household electrical appliances, wiring supplies, shades, globes, ranges, etc. (Uruguay).
31100 Paints and varnishes (Chile).
31109 Paint-spraying equipment, portable electric, for automobile bodies and metal work (Chile).
31111 Refrigerators, household, electric (Cuba).
31142 Household appliances, mechanical (Netherlands).
31168 Electrical devices (New Zealand).
31112 Household electrical appliances.
*31341 Enameled ware (Argentina).
*31312 Wall and insulating board.
31236 Lacquers, spraying, pyroxylin (Australia).
31292 Household electrical appliances (Austria).
31220 Electrical appliances (Chile).
31244 Household motor driven appliances (Germany).
31241 Refrigerators, electric (Germany).
31537 Hardware, household and heating and cooking equipment (Germany).
31528 Household electrical appliances, motor driven (Germany).
31534 Household electrical appliances, motor driven (Germany).
31537 Household electric appliances and motor driven devices (Germany).
31530 Refrigerators, electric (Germany).
31522 Refrigerators, electric (Haiti).
31523 Refrigerators, electric (Haiti).
31435 Dairying machinery (Cuba).
31461 Chemicals, industrial (Germany).
31433 Motors and generators (Haiti).
31440 Pyroxylin lacquers (Australia).
31440 Spray gun, lacquer (Australia).

Universal Cooler Forges Ahead in Canadian Border Cities

Pleasing Display by the Windsor Hydro Electric System, Windsor, Ontario, Recently Appointed Universal Cooler Dealer

The photograph above is evidence of one of the ways in which Universal Cooler equipment is working its way into the favor of the Canadian public, according to J. H. G. McKee, supervisor of domestice sales, Universal Cooler Co. of Canada, Ltd. This display in the windows of the Windsor-Hydro Electric System, Windsor, Ont., recently appointed dealers, aroused much interest.

Among those actively engaged in promoting the sale of Universal Cooler machines in Canada are: G. M. Johnston, managing director; George T. White, assistant manager; C. E. Costain, comptroller; J. H. G. McKee, supervisor of domestic sales; William H. Lucas, factory superintendent; J. H. Stoliker, service superintendent; M. A. Blodgett, purchasing agent.

Factory branches are located in Vancouver, B. C., and London, Ontario, under the supervision of G. J. Ryan and P. T. Brinsmead, respectively.

NOVOID CORKBOARD

For all commercial jobs you will find NOVOID Corkboard Insulation the most satisfactory insulating material for the purpose. It is convenient to use. It comes in 12"x36" and 24"x36" sheets, in 1", 1½", 2", 3", and 4" thicknesses. Shipped in strong fibre containers, each containing 72 board feet. Samples on request.

Write for Catalog E-2
CORK IMPORT CORP.
345-349 W. 40th St., New York
Branches in Principal Cities

We will install and put into successful operation a complete porcelain enameling plant for porcelain enameling your refrigerator linings and parts at a reasonable price.

Write for estimate.

The Ferro Enamel Supply Co.
CLEVELAND, OHIO

Write for our new 1928 proposition assuring you
MORE AND BIGGER SALES
with Thesco Display Fixtures
The C. SCHMIDT COMPANY
John and Livingston Streets — THE HOME OF THESCO PRODUCTS — Cincinnati, Ohio

DRINKING WATER FAUCETS
for
Refrigerators - - Water Coolers
Cordley & Hayes
1 Leonard St. New York City

PEERLESS FLOODED TYPE EVAPORATORS
For use on either Methyl Chloride or Sulphur Dioxide.

The PEERLESS one-piece, galvanized casting cooling unit provides the quick freezing advantage of the direct expansion unit with the hold-over advantage of the brine tank. The entire casting is cored, and ice trays are placed directly over the boiling refrigerant, giving an exceptionally short "freezing time."

The entire surface of the unit is "cooling surface," available in maintaining correct refrigerator temperatures at a minimum power cost.

Shut-off valves are "flanged" to the float valve assembly, repairs and adjustments are made quickly with no trouble. A large capacity strainer is incorporated between the liquid shut-off valve and the "needle" valve. This can be removed and cleaned without loss of refrigerant.

Manufactured in sizes and cube capacities to meet every condition.

PEERLESS ICE MACHINE CO.
515 W. 35th St. CHICAGO, ILL.

Mineral Wool

assures
Perfect Insulation
for
Cold Storage Construction

The low thermal conductivity necessary for maximum insulating efficiency is ideally supplied by this indestructible, vermin-proof and entirely mineral material.

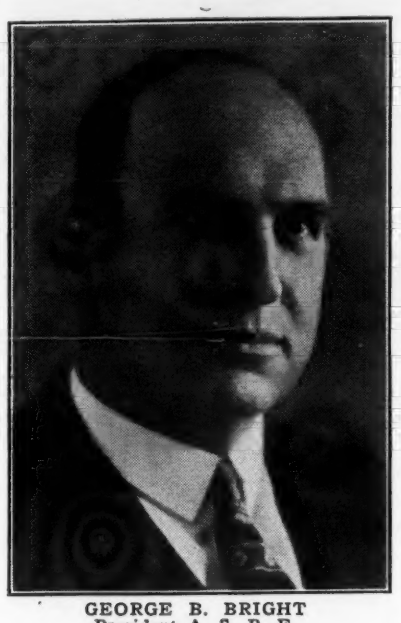
Mineral Wool is rated 6.3 B. T. U. by the U. S. Bureau of Standards and the low cost makes its use a real economy.

Send for sample and descriptive folder.

U.S. MINERAL WOOL CO.
280 Madison Avenue, New York
Western Connection: Insulating Products Company, 1553 West Madison St., Chicago

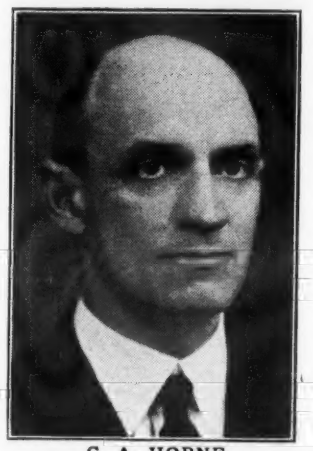
In Spotlight at A. S. R. E. Meeting

A. W. OAKLEY
Chairman Program Committee



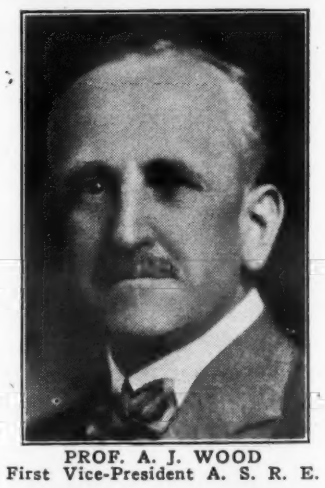
GEORGE B. BRIGHT
President A. S. R. E.

S. C. BLOOM
Chairman Refrig. Applications Div.



G. A. HORNE
Member Executive Committee

DAVID L. FISKE
Secretary A. S. R. E.



PROF. A. J. WOOD
First Vice-President A. S. R. E.

H. HARRISON
Chairman Research Committee

C. F. BELSHAW
Chairman Refrigerator Div.

C. C. SPREEN
President Detroit Section

F. N. SPELLER
Chairman Corrosion Committee

E. S. EVANS
E. S. Evans & Co.

R. H. HEILMAN
Mellon Institute

DR. LOUISE STANLEY
U. S. Dept. of Agriculture

V. R. JACOBS
Goodyear Tire & Rubber Co.

H. D. EDWARDS
Second Vice-President A. S. R. E.

C. H. FESSENDEN
University of Michigan

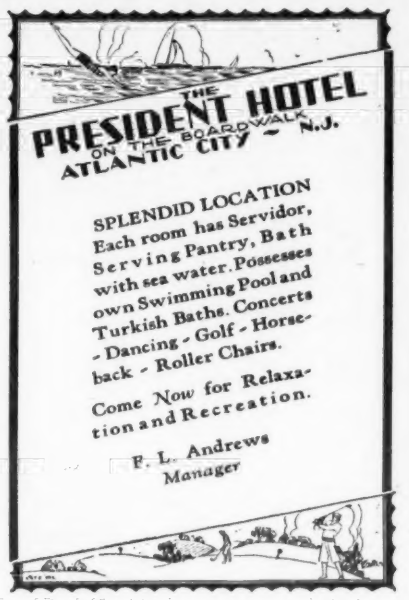
H. F. TAYLOR
Atlantic Coast Fisheries Co.

Increase Your Earning Power

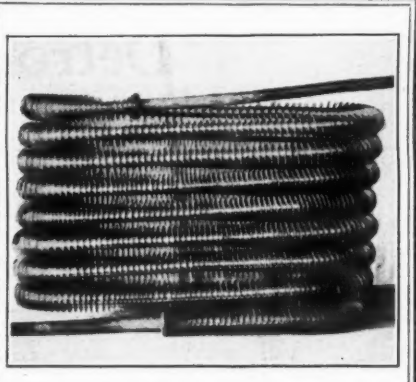
Study Electric Refrigeration at Home in Spare Time

Complete, practical Course, covering all phases of the industry. Great aid to Executives, Salesmen, Installation and Servicemen.

Send for FREE Illustrated Catalog.
UTILITIES ENGINEERING INSTITUTE
Dept. 46, 3120 No. Clark St., Chicago


THE PRESIDENT HOTE
ON THE BOARDWALK
ATLANTIC CITY - N.J.
SPLENDID LOCATION
Each room has Servidor, Serving Pantry, Bath with sea water. Possesses own Swimming Pool and Turkish Baths. Concerts - Dancing - Golf - Horseback - Roller Chairs.
Come Now for Relaxation and Recreation.
F. L. Andrews
Manager

NORTHEY
Freezer, Display Cases, Coolers and
REFRIGERATORS
FOR ALL PURPOSES
ANY SIZE, STYLE OR FINISH
NORTHEY MFG. CO.
WATERLOO, IOWA
AGENCIES IN MOST LARGE CITIES
WATERLOO DIRECT TO YOU



ROME CONDENSERS
are formed in any shape of one piece of seamless copper tubing, fitted with heavy gauge copper radiating fin. Rome condensers are five times as efficient as plain tubes

Rome-Turney Radiator Company
ROME, N. Y.

HERRICK
COMMERCIAL REFRIGERATORS

Best results will be obtained if your unit is installed in the HERRICK

Write for full details

CATALOG No. 38
Residence and Aparment Models

CATALOG No. 28
Commercial Models

Herrick Refrigerator Co.
1019 Cedar St., WATERLOO, IOWA

A.S.R.E. ~ WELCOME

Fifteenth Western Meeting, Americ
Hotel Statler, w

Kelvinator

Fourteen Years of
Quality Leadership

KELVINATOR CORPORATION

14250 Plymouth Road, Detroit

Detroit Distributor:
Dalrymple-Kelvinator Co.
2842 W. Grand Blvd.
Empire 9840

Hogarth 8200

1

The Universal Cooler *fills a universal need!*

Domestic—Commercial—Apartment House—Ice
Cream Cabinets—Water Coolers

Universal Cooler Corporation

Offices and American Factory, 18th and Howard Streets

Canadian Plant, Howard Street and Tecumseh Road, Windsor

Refrigeration by Wire

2

Detroit Ice Machine Co.

George B. Bright Co.

Refrigerating Engineers and Architects

2615 Twelfth St., Detroit

Glendale 9680

3

Flintlock Condensers

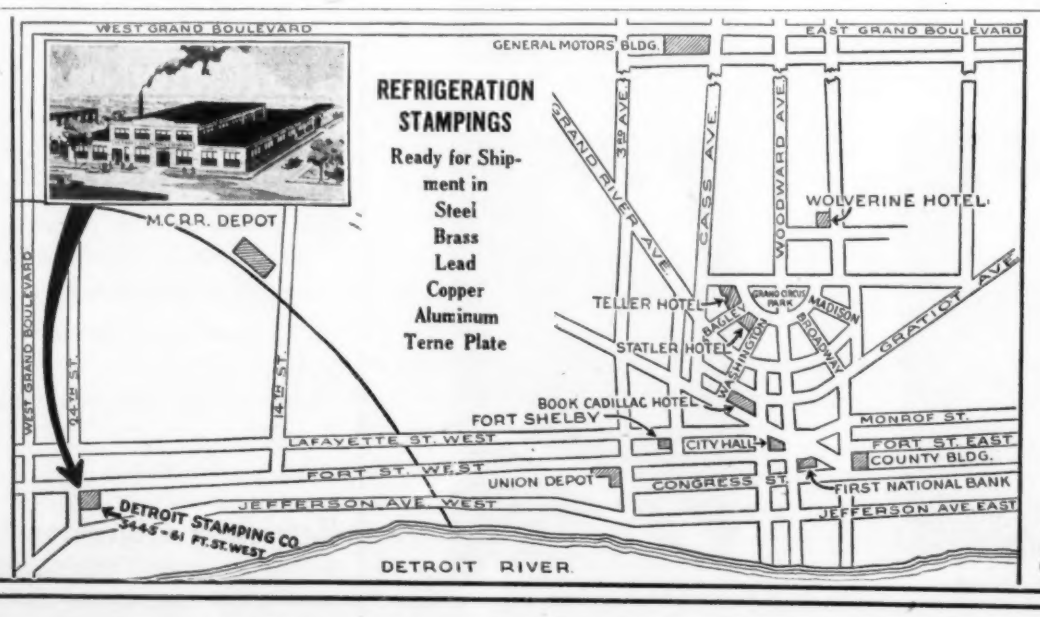
For

All Sizes of Electric Refrigerators

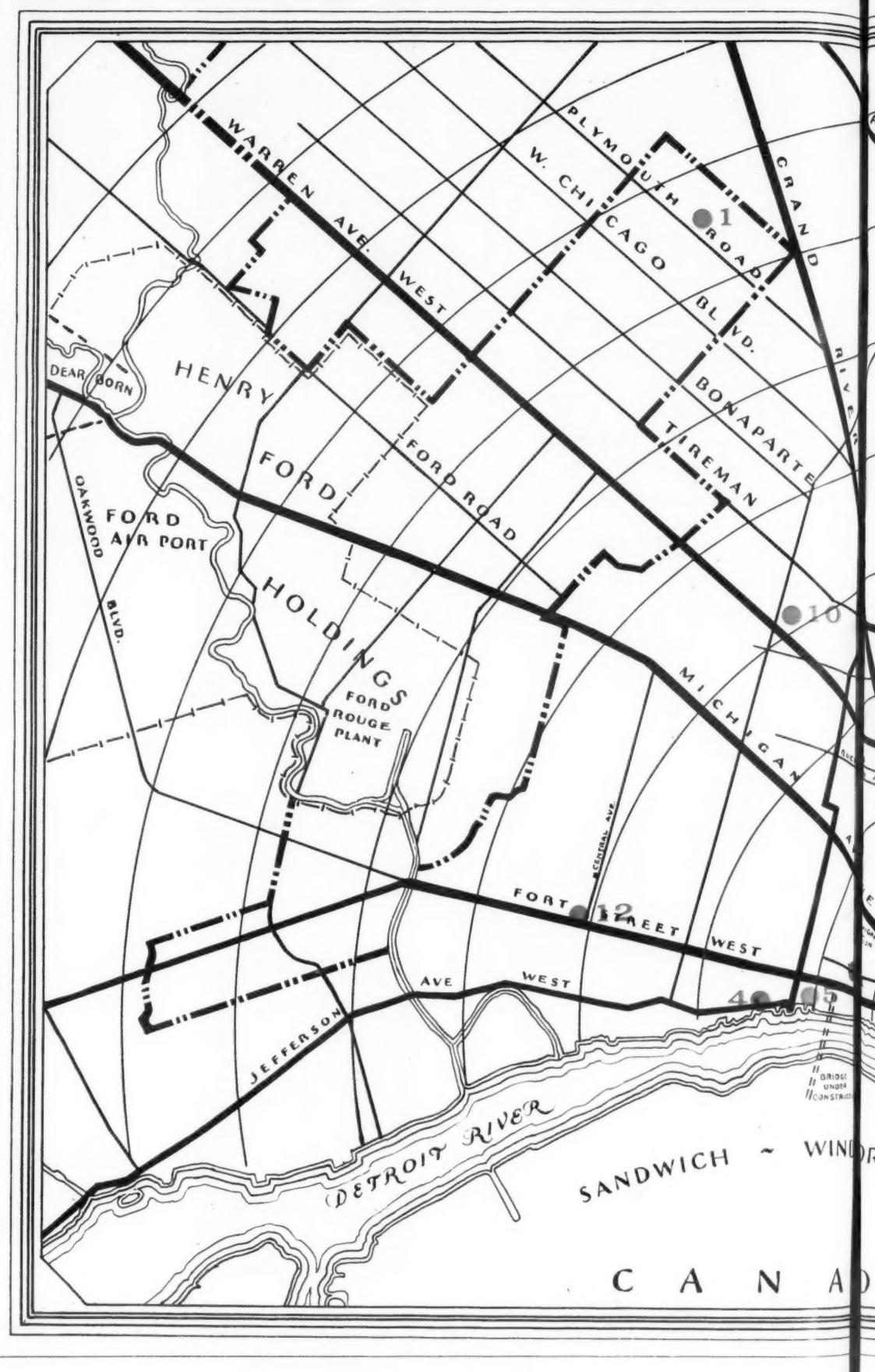
FLINTLOCK CORPORATION

4461 Jefferson Ave. West (Foot of Clark Ave.)

4



5



Welcome A. S. R. E.

Welcome to Detroit and thrice welcome at the McCord plant where McCord Condensers and McCord Evaporators are built.

McCord Radiator & Mfg. Co.

2587 E. Grand Boulevard

(Take East Grand Blvd. bus and get off at Riopelle Street.)

ELECTRIC REFRI

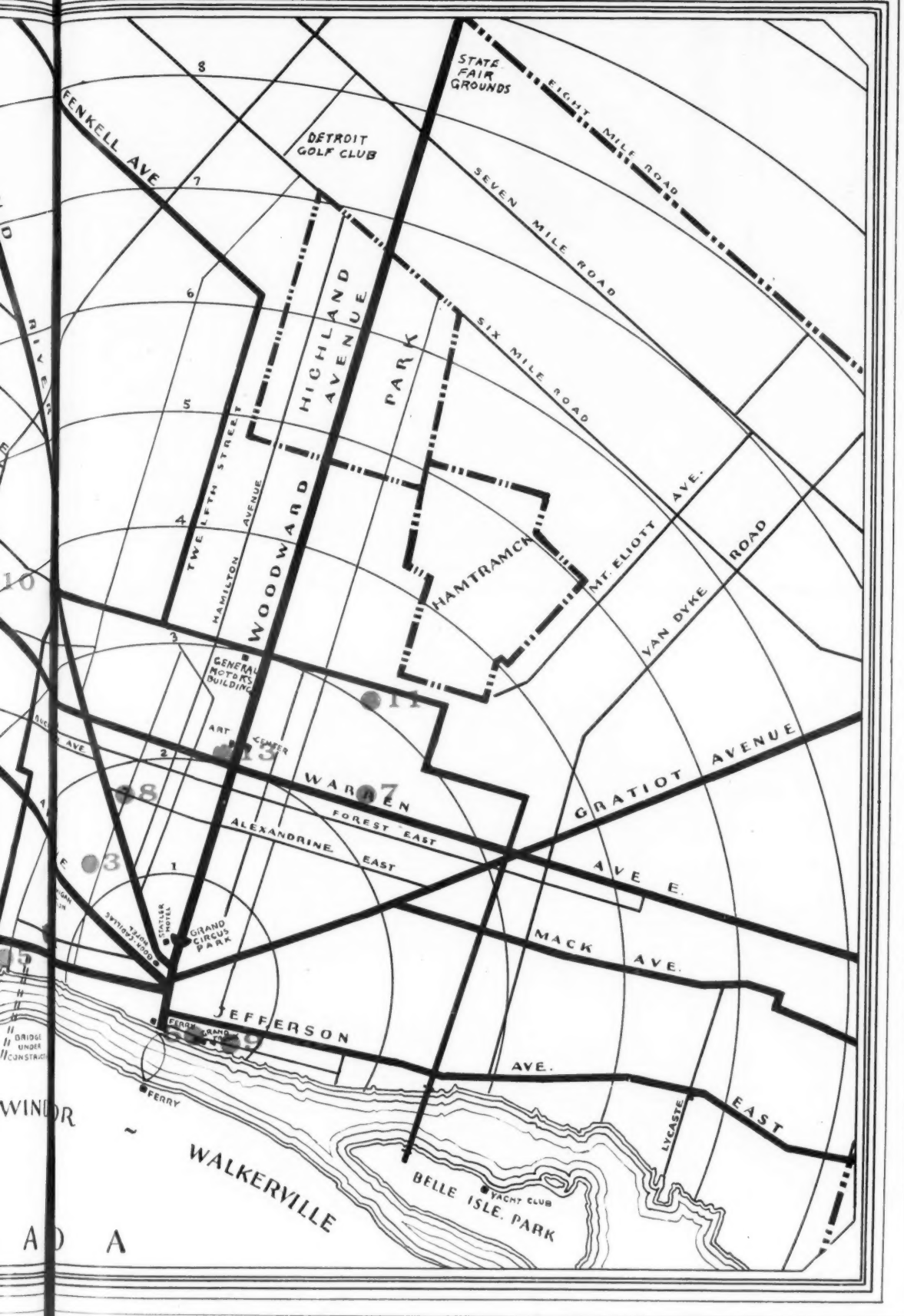
The Business Newspaper the

5057 WOODWARD AVENUE

Northway 3 an

to DETROIT ~ A.S.R.E.

erica Society of Refrigerating Engineers,
ler, June 4-7, 1928



Commercial ELECTRIC RICE REFRIGERATION Domestic

RICE PRODUCTS, INC., extend a cordial invitation to A. S. R. E. delegates to visit our factory at 311 South Beaubien Street (4 blocks east of Woodward Ave., and 1 block south of Jefferson Ave.) When in New York City visit our offices at 100 East 42nd Street.

6

Absopure

Electric Refrigeration

GENERAL NECESSITIES CORP.

Frigerator Div. Office
1560 Theodore
Melrose 4700

Absopure Frigerator Co.
Local Sales and Service
5814 Cass Ave.
Northway 6483

Main Office
2011 Park Ave.
Cadillac 9000

7

Commonwealth Brass Corporation

Manufacturers of Forged Brass Fittings for Connecting Brass and Copper Tubing

ESPECIALLY DESIGNED TO MEET MECHANICAL REFRIGERATION REQUIREMENTS

Plant and general offices located at Commonwealth Ave. and Grand Trunk Ry., one block west from Trumbull car line.

8

NORGE

Economical Refrigeration

NORGE CORPORATION
673 E. Woodbridge St., Detroit
Randolph 7220

9

Electric Refrigerator Condenser Coils
Dehydrated Copper Tubing for Refrigeration Use.
All Sizes

WOLVERINE TUBE CO.
SEAMLESS COPPER BRASS & ALUMINUM

1112

1431 Central Ave., Detroit, Mich.

No. 6 Bus at City Hall to Central Ave., Walk 3 blocks to left.

Motors Metal Mfg. Co. 5936 Milford St.

Extend Greetings to the A. S. R. E.

We are Manufacturers of General Refrigeration Stampings including: METAL GUARDS FOR UNITS—ANGLE IRON SUPPORTING BASES—STEEL PANELS FOR HOUSEHOLD BOXES—FRAMES—PANELS FOR WATER COOLERS—ICE CREAM CABINETS READY FOR YOUR UNITS.

Take Warren Street Car to Epworth Ave., and walk 2 blocks North and 1 block West.

10

RIGERATION NEWS

per The Refrigeration Industry

3 544 MACCABEES BUILDING, DETROIT

nway 43 and 4244

Methods Used by Connecticut Light & Power Co. to Sell 1000 Refrigerators in 1928

CONNECTICUT Light & Power subsidiaries and divisions outside of Hartford exceeded their Spring-drive refrigeration campaign quota of 200 by 96½%, as stated in May 23 issue of ELECTRIC REFRIGERATION NEWS. Details of arrangement and operations for sales of domestic and commercial Frigidaire units follow.

Special cash and time prices were made, with time terms $15 or more down, and the balance in 18 monthly payments, with no discounts or allowances for traded-in boxes. Commercial and domestic units were to be sold in all divisions except Meriden, which was exclusively for home units. Customers could buy at the cash price on 60 days' time, if request was made. The campaign was scheduled March 12 to April 21.

The electric territory was divisioned and quotaed as follows:

Waterbury	45 units
Naugatuck	10
Seymour	5
New Britain	32
Norwalk	20
Westport	6
Branford	10
New Milford	10
Meriden	14
Southington	6
Bristol	20
Greenwich	22

on a basis which was exceedingly conservative, but with the provision that the quotas could reasonably be doubled, and that quota sales should be exceeded.

Regular salesmen of the system were aided by Frigidaire salesmen helping them work all districts several days a week, coming from New Haven and Hartford, with system salesmen particularly careful in assembling and lining-up prospects on an efficient routing basis. Each placed refrigerator included necessary follow-up by the Home Service dept., with actual home making of desserts, ice cream, etc., in the buyer's household.

Selling was placed on a logical basis. Salesmen were instructed to approach prospects on a basis of better food preservation and its benefits, then to "sell" electric refrigeration, and finally to concentrate on Frigidaire and the campaign offers.

Salesmen selling in each district, whether in company stores or at homes, were to arm themselves with knowledge of local-users satisfaction with already installed units, local ice rates, condition of local ice supply, lists of local ice cream retailers, give study to ice-box prices locally and compare against Frigidaire units of same cubages and to note competitive electric refrigerators on sale locally.

Principles of Correct Selling Emphasized

Correct principles of selling to apply during and after campaign were emphasized: Sell electric refrigeration—do not peddle electric refrigerators. Explain superior Frigidaire advantages—do not knock competing machines. Start out with definite plans—do not try to sell a whole section. Be in your territory evenings—the best time for calls. Keep away from the office except for appointments. Remember to have your sales kit with you always. Plan now evenings to spend in your territory. Sum up each refusal, not excusing someone not buying. Call on the prospect today—not tomorrow. Work hard. Ask your prospect to buy—do not let them ask you; ask them repeatedly from the time you think they understand the superiority of electric refrigeration, as you canvass them.

Salesmen were advised that installment buying only made present automobile volume sales possible; that customers are to be encouraged to buy on a budget plan.

Salesmen were advised of special terms to employees of the system: storeroom cost unit, plus 5% storeroom charge, plus cost of installation, plus 12 months interest charge, but 24 monthly payments allowable. This split the regular 10% company charges to employees on purchases during the campaign period.

Salesmen were supplied a canvass, "How to go about selling the idea of electric refrigeration," which carried the steps: Approach, Selling cause of food decay, Investigation, Analysis of investigation, Sell the need, Selling your machine, Selling it as best answer, Proposal, and Closing.

A Sales Meeting Every Morning

Morning sales meetings were held daily to discuss electric refrigeration, each salesman reporting yesterday's happenings, and means for inspiring enthusiasm for the day's work created at division showroom headquarters. "Tu-tone" cabinets were displayed; metal cabinets were on the floor to help fill-in, if a lower-price machine was wanted.

Advertising during the campaign comprised; special newspaper advertising by the head office, at call from districts; attention to national advertising of manufacturer, now at its peak of influence; distributors' national advertising by their territorial offices in local papers; direct-mail broadsides, specially prepared, and for mailing by company district headquarters to district prospects; showcard copy for window displays; descriptive folders supplied salesmen; 24-page color book on refrigerator supplied from manufacturer for salesmen; company truck signs and banners during campaign.

Window displays of strong sales appeal with frequent changes were carried during the campaign period, with attractive cards selling electric refrigeration, and use of the special window-lighting equipment with help from the company lighting service department evenings. Refrigerators were dressed with wax fruit, following ideas of each headquarter's store.

Store Display Brought Up-to-date

Store floor displays included plugged-in operating machines, filled with actual supplies, eliminating noisy, too-cold or defective units, or those with parts missing. Suggestion was made that local dairy be approached to supply milk, which is to be sealed in a unit by a prominent townsman for 10 to 14 days' refrigeration, advertised by papers and by pamphlets or leaflets distributed by the milk company to their customers, and after a ceremonious unsealing of the milk to advertise the results.

Prospect gathering was systematized. Employees in all activities of the company uncovering prospects later sold by salesmen received $5 bonus, plus 1% of the sale. Departmental meetings and continuous contacting were used to educate employees to talk electric refrigeration intelligently, experience by employees in the previous Handy Household Kit campaign having already trained them. Salesman's prospect blanks carried all data on 3x5 leaves, including records of finder, mailings, calls, quotations, and technical data to make a complete record.

Prizes were distributed to salesmen: $15 for the salesmen with most sales during the campaign; $15 for the "complete line" appliance salesman making the most unit sales of the refrigerators during the campaign; on each sale made in districts with three or more salesmen. A sale entitled the salesman to one punch on a special punchboard with as many squares as the district quota, carrying prizes of 25c., 50c., $1, $2, or $3 in cash. Also a special Milford and Branford prize of $10, for quota exceeded in either district.

Detailed results of the campaign were the following super-quota sales in order:

Norwalk	26 quota	80 sales	308% of quota
Waterbury	60 quota	77 sales	128% of quota
New Britain	32 quota	76 sales	238% of quota
Bristol	20 quota	63 sales	315% of quota
Meriden	20 quota	42 sales	210% of quota
Greenwich	22 quota	34 sales	154% of quota
New Milford	10 quota	11 sales	110% of quota
Branford	10 quota	10 sales	100% of quota

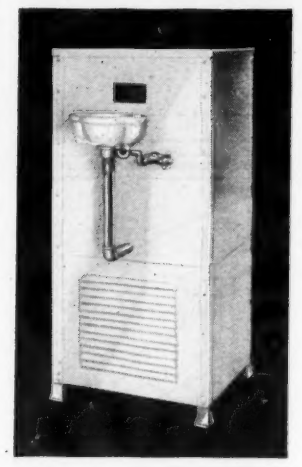
The Connecticut Light & Power Co., also has an annual quota of 1000 units during 1928, this standing on April 30 at 616 units in the first four months' sales for the year, as stated in last issue of ELECTRIC REFRIGERATION NEWS.

G. E. Research Laboratories Develop Protective Cream for Workmen

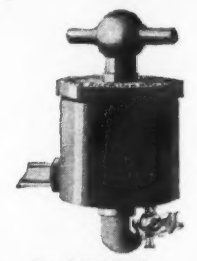
The Research Laboratories of the General Electric Company have developed a protective hand cream which is furnished as a safety measure to those men in G. E. plants whose hands and arms are exposed to oil, grease, dirt, varnish, paint and other causes of skin discoloration and irritation encountered in industrial processes. It is applied before beginning work and forms an invisible film which quickly dries and is not slippery. Subsequent washing in warm water quickly removes the film and with it the stains which otherwise fill the pores of the skin and are difficult to remove, and likely to cause infection.

This cream has now been placed on the market by the merchandise department of the company at Bridgeport. It will be packed in tubes to sell at 25c per tube for individual use and also in one pound cans for industrial use.

Now....the Cooler that meets Peak demands with an economy of operation that makes it Outstanding—



Model No. 1A. with Filter-Bubbler



No. 3 FILTER
is sold at its unusually low price because of volume production.

Build permanent sales—with this dependable, reserve-capacity Cooler

DESIGNED for large capacity—planned for economical operation and maintenance—built for permanent satisfaction by a house famous as specialists in drinking water equipment.

Model No. 1A, illustrated, is a handsome self-contained type, finished in white or grey lacquer suitable for use with any standard compressor unit and Filtrine filter . . . both known throughout the country for dependable, lasting efficiency.

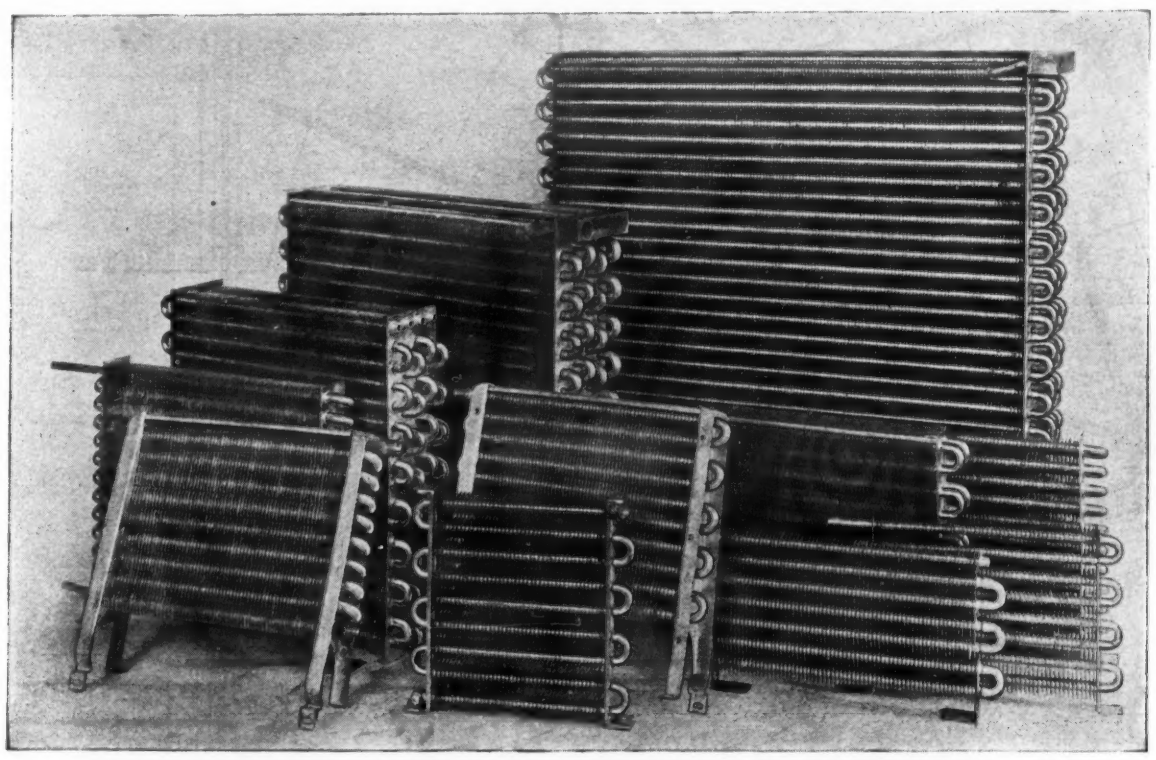
Fitted with Halsey Taylor Automatic Bubbler—all materials are the very finest—insulated with 4" pure corkboard—with a special outlet at the back for chilled water for use with remote fountains, replacing the cumbersome and expensive circulating systems at far less cost.

Here is a model which combines every feature of every other make—and *many* more! A model you can sell with profit—and with confident assurance that it will *stay sold!* Write today for the attractive details of this complete and profitable line.

Capacity 25 to 220 gallons per 2 hour peak

DEALERS: Write for attractive proposition on our complete line.

The FILTRINE MANUFACTURING CO.
49 Lexington Ave. Brooklyn, N. Y.
Manufacturers of Coolers and Filters of All Sizes



BUSH CONDENSERS

Made in Any Size or Capacity

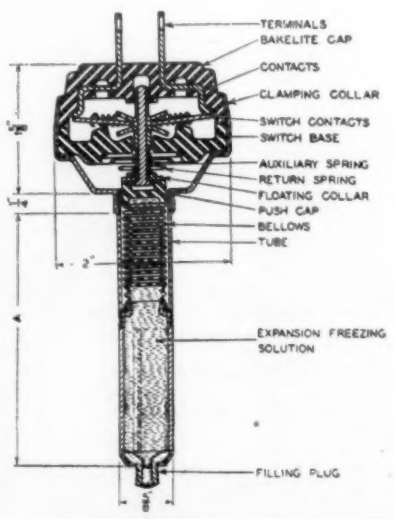
SEAMLESS COPPER TUBES
INDIVIDUAL FINS

Maximum Efficiency

BUSH MFG. CO.
HARTFORD, CONN.

WHITE-HANNA
302 Lincoln Building DETROIT, MICHIGAN

"RANCO" THERMOSTAT CONTROLS



Have many points of superiority

(1) Permanently adjusted.
(2) Can be mounted in small space.
(3) Will operate in any position.
(4) Unaffected by vibration.
(5) Easy to install.
(6) Never needs calibrating.
(7) Fool-proof—can be installed or serviced by an inexperienced person.
(8) Reduces service calls to practically nothing.

Write for Bulletin

THE AUTOMATIC RECLOSING CIRCUIT BREAKER CO.
1304 WESLEY AVE. COLUMBUS, OHIO

"As I See the Sales Force"

Many Opportunities for Cooperation Between Sales and Service Departments

By a Service Manager.

WHEN I was appointed service manager and Bill was made sales manager of this department—electric refrigeration—we made each other a solemn promise that we'd work together, help one another and in every way promote the use of electric refrigeration, since it opened for us a new line of endeavor, one which certainly will grow and we'll grow with it because we are on the ground floor working up. We knew a lot of pioneering work had to be done, that the big boss would expect results and increasing profits as the sales organization got under way.

Bill and I decided that if we'd work together, we'd both he able to hold our jobs because we could make good. We've been working that way for two years, now, and everything is lovely. The reason probably is that when I see the sales force doing something wrong, I go direct to Bill and we talk it over, instead of my running to the big boss and telling him a lot of faults in Bill and his gang that I discover in servicing the machines they have sold. The result is that Bill has a sales force now that functions right and saves my department considerable money during the guarantee period.

Bill has put me wise to a number of things that has enabled me to improve my service force and make then a secondary line of salesmen to assist Bill. Bill has trained some of his salesmen to make little adjustments to refrigerators that save me having to send one of my men out to do the jobs. For two years it's been Bill and I putting over the proposition.

Our experience—Bill's and mine—is that salesmen are frequently over-zealous; they make promises that should never be made; exaggerate the ability of the mechines to do certain things in their efforts to close the sale and get the commission. The salesmen frequently underestimate the installation cost, being fearful, no doubt, that a correct estimate will scare the customer's right hand from the dotted line. When orders are gotten under such conditions, it works a hardship on my department, for we dare not do our work in a slip-shod manner, because we owe it to the customer to do a good job, yet the big boss eyes the expense and, when he sees that the profit on the job is not as large as it should be, he wants to know "how come?"

When I showed Bill the situation and explained how such installations affected my department, he called his men together and told them what was what. The result is that we have fewer and fewer exaggerated promises and under-estimated installation costs to contend with.

Salesmen would rather make promises quickly in an effort to conclude the interview and the sale than to take the time to explain what the customer may expect. For instance, on the question of freezing cubes of ice. The customer may ask if he can have cubes of ice in an hour, and the salesman will say "yes" in order to save time, instead of going into detail and telling the customer that under such and such conditions he can have ice in so many hours or minutes, depending entirely upon the conditions under which the refrigerator is working.

Then, when the customer has the machine installed and wants ice in an hour, what happens? Well, the customer thinks there is something wrong with the machine, puts in a service call and our men have to explain the situation. That service call will come within the guaranteed period and my service department handles that call at a loss. In addition the customer is disappointed in his expectation of the machine's capabilities and resents being misled by the salesman. He is not so likely to boost for our machine and our company.

When I got a few calls of this sort, I had a talk with Bill and Bill took it up with his sales staff, with some results.

Where we have remote installations, it frequently happens that the salesman doesn't take time enough to explain to the customer that the location selected by the customer for the motor and compressor is not suitable. When we get the installation order and ascertain the situation, a delay ensues while we or Bill or the big boss endeavors to prove our contention and get another location. A few of such cases has convinced Bill that the salesman should take more time investigating the proferred locations for remote installations so we can cut down the time our part of the work requires and, incidentally, make the customer better satisfied.

There are so many little adjustments that a salesman might make, that will relieve the service department that Bill sent his bunch down here one night and we explained just how the adjustments could be made. It's a good idea for the salesman to call back upon his customers every once in a while in the hope of obtaining from them the names of likely prospects. Certainly the plea that he is calling back to see if the machine is working properly and if there are any little adjustments that ought to be made is a legitimate excuse for the visit. It also makes friends for the salesman and the company. It may take an hour of the salesman's time, but the chances are that he couldn't spend a more profitable hour.

On the other hand, Bill had a little talk with me, one day, explaining what he thought of my service men, declaring that he had two or three reports of discourtesy on their part. I quickly remedied that and henceforth my service men are courteous. They don't talk too much, but enough to answer the questions asked by the customer and explain some of the little things customers would like to know about. They wipe their feet before entering the kitchens, and they see to it that they do not make too much noise or too much mess to be cleaned up by the housewife later. They keep themselves neat and clean and never smoke while in the customer's kitchen.

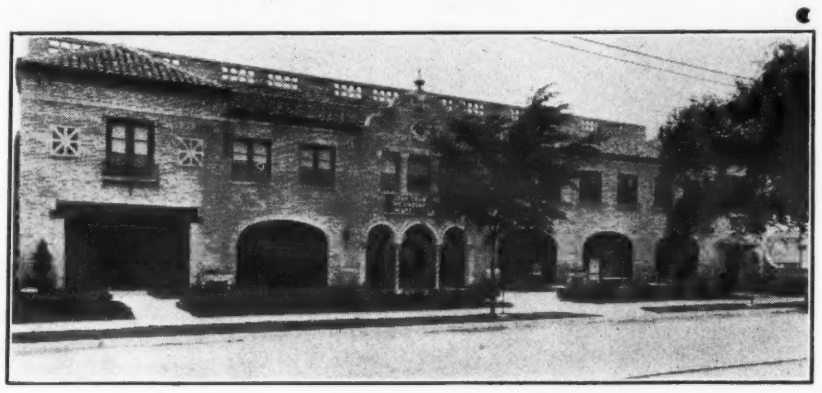
My purpose is to create such a good impression with my service force that our customers will recommend us to their friends; that when they hear of a friend who should have an electric refrigerator, they will recommend our company and, incidentally, remark:

"And if you ever do need any repair work on your machine, that company employs the nicest service men to do the work."

Bill's training his men to be demonstrators, too, for one of the things we've discovered is that customers have to be shown, sometimes, just how to make frozen desserts to get the best results. That's increasing the friendship of the customers for our firm and saving me a lot of needless service calls.

Lists of central stations can be taken care of for the campaign for such small quantities as only 100 names of prospects, starting immediately, with further expansion to any extent by the companies as the prospect compilation permits the increase. In a few cases, budgets have not permitted the central station to adopt the campaign on the broad basis that its merits deserve, and these companies are using the campaign on a small test plan, with the intention of operating it on large listings in September and October. However, it will be several months before the full benefits of the campaign will be harvested by the sales departments of the companies using it in its present form.

Location in Theatre Building Proves Valuable To Milwaukee Frigidaire Dealer



Werwath Builders, Inc., 1266 Oakland Ave., Milwaukee, Wis.

A Frigidaire accompanied by other furnishings for the modern home occupies a prominent position in the fine display windows of Werwath Builders, Inc., 1266 Oakland Ave., Milwaukee, Wis., shown above. Located in the new Shorewood Theatre building, by which hundreds of people pass every hour, this firm finds that people visit the store and show an interest in electric refrigeration who in many cases would otherwise be unknown and never appear on the prospect list.

The fact that other equipment for the modern home in addition to electric refrigeration is displayed in these windows causes people to make it a point to notice the display since it is changed from time to time and something of interest is always to be seen.

Juruick
REFRIGERATION
—for every commercial requirement

The Juruick is a profitable proposition for dealers who can handle a complete line of refrigeration for every commercial requirement.

Set the thermostatic control—"turn the switch"—and the Juruick automatically provides just the degree of cold required, day after day at minimum cost. Such is Juruick service.

Desirable territories are still open for responsible dealers

AMERICAN ENGINEERING COMPANY
2403-13 Aramingo Ave., Philadelphia, Pa.

SPECIFY ANSUL SULPHUR DIOXIDE

Write Us—
There is a Satisfied User Near You

The Product With a Factor of Safety

ANHYDROUS SULPHUR DIOXIDE
ANALYZED

Absolute Protection for Refrigeration

ANSUL CHEMICAL COMPANY
MARINETTE, WIS.

Canadian Distributor: Grasselli Chemical Co., Ltd.
Toronto — Montreal

ATLAS REFRIGERATOR CASES

FOR WORLD-WIDE SHIPMENTS

Leaders in the trade are shipping refrigerators to all parts of the globe in sturdy Atlas Refrigerator Cases. Atlas Cases made of strong, resilient plywood completely enclose the carefully finished parts of a refrigerator and furnish a protection to their polished surfaces and all other parts that is impossible to obtain from any other type of packing. Mars and scratches become a thing of the past; damage claims are reduced to a minimum; and a big freight saving results from every shipment in these lightweight containers. If you want to please your agent or dealer and save yourself money on both domestic and foreign shipments, pack your beautifully turned out refrigerators in protective Atlas Refrigerator Cases.

Atlas Packing Cases
CARRY THE WEIGHT—SAVE FREIGHT
ATLAS PLYWOOD CORPORATION
Park Square Bldg. Boston, Mass.
New York Office 90 West Broadway
Chicago Office • 649 McCormick Building
SOUTHERN DIVISION (formerly Empire Mfg. Co.)
Goldsboro, N. C.

1967

Sales Talk

Pemco Porcelain Enamels are the basis of a good refrigerator sales talk. Fused into the metal--the "one-piece" enamel--PEMCO makes *sales* talks a reality. Porcelain Enamel & Manufacturing Company, Baltimore, Md.

PEMCO
TRADE MARK REG. U.S. PAT. OFF.

FLORIDA DEALER TO HAVE MODEL HOME FOR SALES, SERVICE

Display Room Cooled by Forced Draft

Trials and tribulations of a new company and later emergence into a successful retail operation covering all types of refrigeration installations and with a most elaborate new home now under construction, were told by C. M. Davidson of Davidson Bros., Refrigerating Engineers of Miami, Fla., during a recent visit to the NEWS office in Detroit.

J. V. Davidson, engineer, C. M. Davidson, sales manager, and S. S. Wheat, electrician and installation engineer, comprising the personnel of Davidson Bros., opened their first display room in March, 1926, in a 16 ft. by 30 ft. headquarters at Miami Beach, Fla., where Valley Electric Refrigerators, later taken over by the Iceola Corp., were distributed. As this product was pressure-controlled and adapted to multiple installations, the firm specialized on multiple apartment-house business, selling the first hundred units exclusively as members of such construction in and near Miami Beach.

The firm then expanded, to engage as distributors of the Lipman full-automatic refrigerating units for the commercial field, placing almost at once five installations, one of which was the Coral Gables Ponce de Leon Market, the finest meat market in the South. A branch office was opened in Coral Gables, and one contemplated in Miami, but the disastrous hurricane of September ruined a 48-unit, a 24-unit, a 16-unit and a 4-unit multiple installation in each case, then being put into new apartment houses, with demolition of the buildings, and great salt-water damage to storeroom stock, causing heavy loss to the firm.

The firm moved almost immediately to a double display location in Miami, comprising two rooms, each 18 ft. by 60 ft., and of which one was devoted to commercial and the other to domestic units, with discontinuance of the Miami Beach and Coral Gables branches. With the bankruptcy of the Iceola Corp., operations in domestic refrigeration activities were temporarily suspended, replacing this activity with the large-capacity Vilter commercial self-contained units, including milk-cooling and ice-making installations, among our customers being the Fairglades, Farway and Eefting dairies. Domestic refrigeration was again taken up in the Fall of 1927, distributing the Everite, Rex and Seeger cabinets, installing multiple installations of Everite and Rex make in the Strauss Apts., Miami, and El Vanala Apts., Miami Beach.

The ample quarters of 1926 in Miami have been outgrown and the firm expansion now demands seven service and installation men, five service cars, our own electrical department under a licensed master electrician, and a complete sales and office force. In addition to the Everite, Rex and Seeger lines of refrigeration, the Quiet May oil burner is distributed in connection with hot-water supply facilities demanded for large apartment houses.

The new building of Davidson Bros., now being constructed for occupation Sept. 1, will be 40 ft. by 100 ft., two stories high, and with every modern convenience for selling and servicing electric refrigeration. It is located on a main arterial highway with railway siding at the rear. The lower story will have a 40 ft. by 40 ft. display room with 14 ft. ceiling, refrigerated by the Vilter forced-draft air-conditioning system, and held at uniform temperature, when necessary, by a Quiet May burner installation under an American Radiator boiler. The finish of the display room will be cast stone, and the approach will be by coral rock steps with wrought-iron railings. Hand-carved doors will lead from the display room to the stock and repair rooms in the rear.

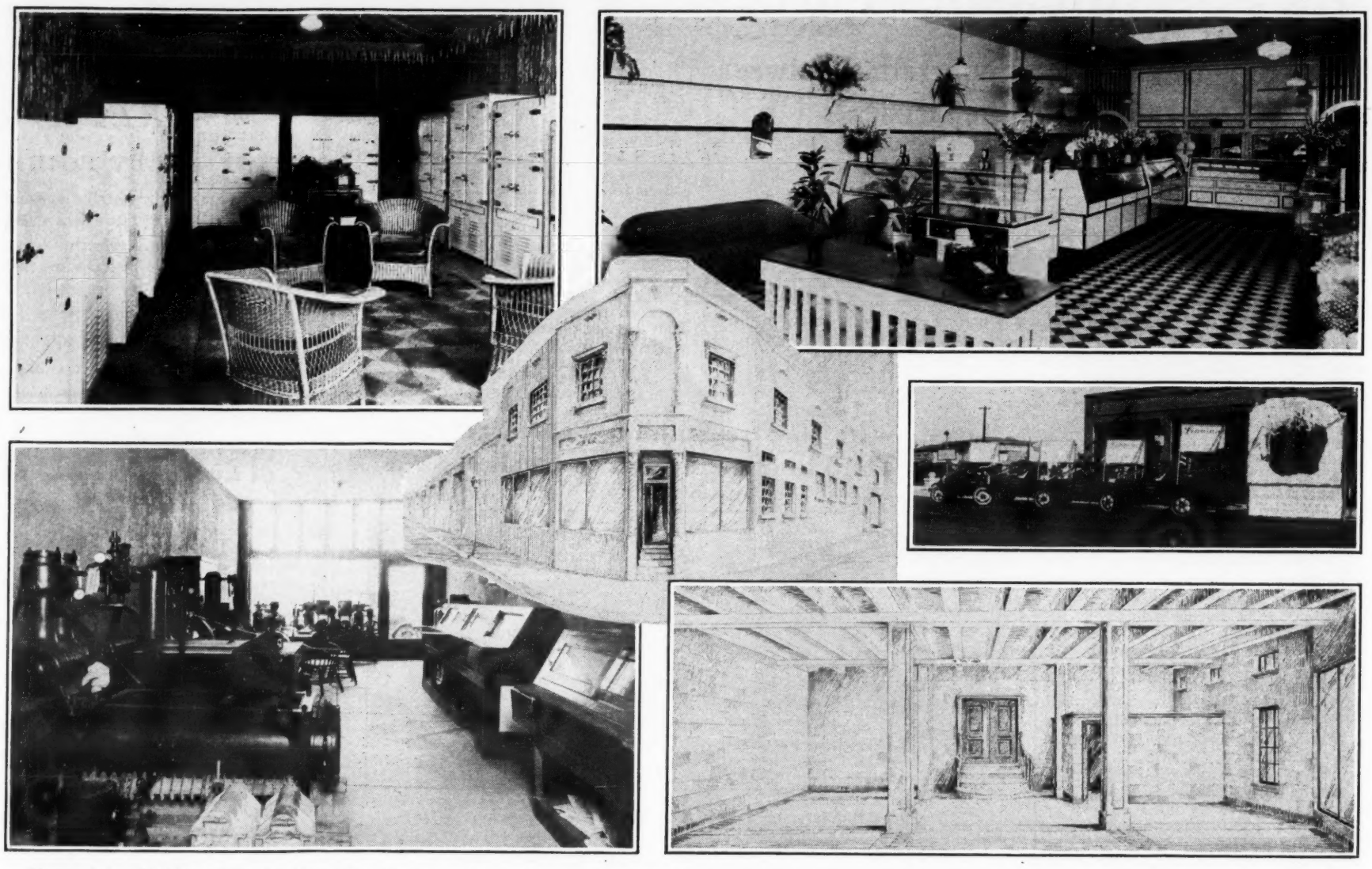
The second floor will house a complete spray-painting department, where domestic cabinets purchased from manufacturers will be finished to order of the customer as desired in any color. The cork insulation department is already building all types and sizes of built-in refrigerators, finished with sprayed-on emulsified mastic, using specially-designed equipment.

This description outlines one of the finest buildings in the South devoted to the sale of refrigerating apparatus. Negotiations are under way to distribute the Taylor Ice Cream Maker, with which will be sold a line of ice-cream cabinets, water-coolers, milk coolers and water pumps, in addition to present lines.

Davidson Bros. have under way at present a contract for the erection of a $125,000 cold-storage plant, to be refrigerated with 10 complete automatic electric units, and undoubtedly one of the finest and first large plants in the United States with separate automatic units. The job requires 100,000 board feet of pure corkboard. Apartment house installations in hand comprise 127 units among five apartment-house properties, which will be opened Nov. 1.

The firm stocks and displays a complete domestic line of electric refrigerator units in 4.5 to 16 cu. ft. capacities, but this type of business represents less than 5% of the gross business, which specializes largely in multiple-installations and commercial business.

Progressive Dealer Prepares to Serve Expanding Market



Upper left—Display room for domestic electric refrigeration equipment of Davidson Bros., Inc., Miami, Fla. Everite self-contained units, Seeger and Rex cabinets are shown.

Lower left—Present commercial display room in which may be seen Lipman and Vilter automatic machines and two Viking display cases.

Upper right—Installation of Lipman unit in Warren cases and cooler in the Ponce de Leon market, Miami, installed by Davidson Bros., Inc.

Center right—Davidson service cars decorated for Lions Club convention parade.

Lower right and center inset—Interior and exterior views of the architect's drawings of Davidson Bros. new home. The display room will be heated by a May oil burner and cooled by a Vilter forced draft cooling system.

Patented—Springless Automatic

Builders of Distinctive Refrigerator Hardware *for*

Patented TRIPLOCK

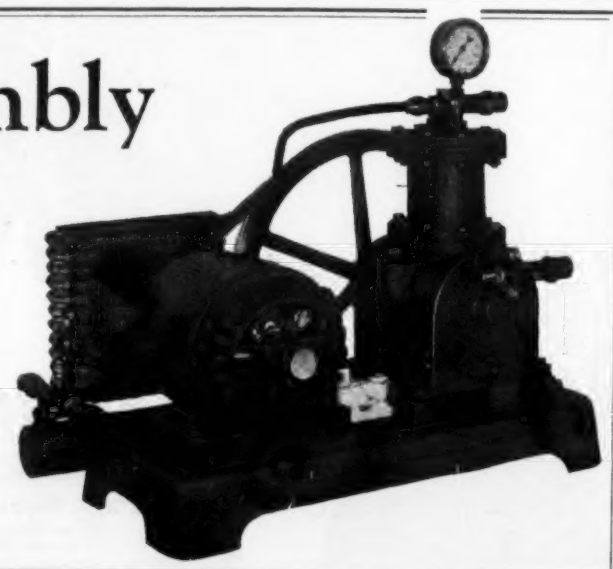
Electric Refrigeration

WINTERS & CRAMPTON MFG. CO.
GRAND RAPIDS, MICH.

High Side Assembly

We offer the Kulair High Side as the successful result of countless experiments and research work by our engineers in their efforts to perfect a truly balanced combination of compressor, motor, condenser, liquid receiver, fuse block, necessary valves, etc., all mounted on a mechanically designed base that can be installed readily in all of the standard cabinets as well as for remote installations.

Write for Illustrated Folder.



Franklin Air Compressor Corporation
Norristown, Pa.

McCORD-BUILT CONDENSERS

McCord Condensers are designed and built to the particular requirements of your refrigerator They are compact, efficient and attractive in appearance.

McCord Condensers, whenever practical, are made from continuous tubing with a minimum of joints, reducing the hazards of leaks. Only seamless, bright, annealed tubing is used. Condensers are delivered, washed, tested and dehydrated with ends plugged.

McCord receivers are made from seamless, copper tubing, the ends being spun closed—eliminating welded joints and avoiding possibility of scale. All fittings are brass drop forgings.

McCord extends the services of their engineers and laboratory in developing more efficient and attractive condensers for your refrigerators.

McCORD RADIATOR & MFG CO
DETROIT MICH.

G. E. RETAIL SALES MANAGERS IN 3 DAY SESSION AT CLEVELAND

30 Distributors' Representatives Hear Talks By Factory Heads

"We are living in an electrical age, and there is a certain romance about this age which makes people want those things which are electrically operated," said P. B. Zimmerman, sales manager of the Electric Refrigeration department, of General Electric Co. in an address before the second meeting of retail sales managers, at Cleveland, May 8, 9, and 10.

Mr. Zimmerman continued, "Had the electric refrigerator been developed at another era, it would not have achieved the tremendous popularity it has. People want convenience and portability."

More than thirty retail sales managers of General Electric distributors from various parts of the country attended this meeting, the second of a series to be held.

A banquet at the Hotel Allerton the second day of the conference, luncheon at the Cleveland Electric League, Hotel Statler, and a visit to Nela Park, "The University of Light" were included in the program. At the end of the three day conference, the retail sales managers presented Paul H. Dow, chairman and host, with a desk set.

The conference was also addressed by J. J. Donovan, apartment house specialist; C. G. Smith, manager credit and collection division; W. M. Timmerman, commercial engineer; H. H. Bosworth, manager central station division; W. M. Potter, Nela Park; W. Sturrock, Nela Park; L. C. Kent, Nela Park; A. C. Mayer, manager merchandising service division; W. J. Daily, manager sales promotion; W. E. Landsmesser, commercial specialist; G. E. Miller, Electrical League; J. T. Dickson, sales promotion; W. E. Heibel, news bureau, advertising division; N. H. Norling, sales promotion.

T. K. Quinn, general manager, discussed the refrigeration business and the General Electric Co., and P. B. Zimmerman, sales manager, closed the meeting.

McCRAY ADDS NEW MODEL TO LINE

McCray Refrigerator Company of Kendallville, Indiana, has added to their already large line of stock Coolers, a new model to be known as No. 190. This model is especially built for electrical or mechanical refrigeration. The points of interest in construction of this cooler are as follows:

The walls are of their standard cooler construction, 5 inches thick, heavily in-

sulated with 3 inches of pure corkboard sealed with Hydrolene cement. The interior is of odorless wood shellacked. The floor is of hardwood. The exterior front and one end is finished in oak, the panels in front, above and below the retail windows are of one-piece porcelain fused on steel.

There is a bevel plate mirror between the retail windows, the retail windows have 3 thicknesses of DSAA glass, and the hardware is of the very latest type. The cooler is especially built for meat markets and meat departments of grocery stores.

The coil chamber is overhead. There is a coil door immediately above the large entrance door. The system is the regular McCray single system with cold air in the rear, and the return air in the front. There are adjustable hangers provided in the top for the hanging of coils.

This new cooler will be built in the size eight feet wide, six feet deep and nine feet four inches high. The coil chamber is 84 by 42 by 16 inches.

Louis H. Storz E. J. Nellor Arthur C. Storz

Storz Company Develops Large Business for General Electric in Nebraska Territory

By Charles P. Rodman.

ABOUT a year ago the Storz Western Auto Supply Co. of Omaha, Nebr., took over the Omaha agency for the General Electric refrigerator. A small room was secured on one of the principal business streets of the city. One manager and five salesmen were stationed at this branch. Now all is changed and the Storz people control the sale of General Electric refrigerators in Nebraska and about twenty counties of western Iowa.

The Storz Company has acquired all the towns served in Nebraska by the Iowa-Nebraska Power and Light Co., about 40 in all. In addition to this, all territory served by the Central Nebraska Power Co., with headquarters at Grand Island, have come under their supervision. That means more than a hundred more men have been added to the force selling G. E. machines in this territory. Stanley Taber, for some time sales manager of the Iowa-Nebraska Power and Light Co., will continue as sales manager for that company and have charge of towns outside of Lincoln.

The Storz management consists of Arthur C. Storz, vice-president and manager; Louis H. Storz, secretary; E. J. Nellor, sales manager for the refrigeration department. The entire territory covered by the Storz Company is under the immediate supervision of Mr. Nellor, with headquarters in Omaha. His selling force includes two people in the office at headquarters, one manager of city sales at Omaha and a sales force of fifteen for city trade exclusively; one manager of the refrigeration department at Omaha; sixteen field men and 172 agency men at various points in the district.

The task laid out for this force for 1928 was made public at the general sales convention of the Storz force held in Omaha, in March. It is up to Mr. Nellor and his staff to produce sales of 3,426 units or approximately $700,000 worth of business by the end of the year. At the convention several prominent men in the electric refrigeration field spoke on subjects concerning the development of the business. J. L. Trawick, general engineer for G. E.; L. R. Edwards, advertising manager; P. B. Zimmerman, general sales manager, and E. J. Nellor, local sales manager, gave short inspirational talks to the assembly. Stanley Taber, sales manager for the Iowa-Nebraska Light and Power Co., Lincoln, Nebr., gave a short but pithy address on "Relationship Between the Commercial Dealer and Central Station."

J. E. Davidson Predicts Widespread Use of Electric Refrigeration.

The address of the evening was given by J. E. Davidson, vice-president and general manager of the Nebraska Power Co., with headquarters in Omaha. Mr. Davidson stated that with seventeen millions of homes in the United States enjoying the advantages of electric wiring at least ten per cent of them are prospective users of electric refrigeration. "Omaha, with its fifty thousand homes, should be a market for 5,000 electric refrigerators of some make," he said. "The surface has not yet been scratched in this city. The rural communities are a virgin field for sales. Especially is this true of the distant districts where the farmer is more isolated and needs electric refrigeration for the preservation of food."

Mr. Davidson pointed out the richness of the territory here as regards farm prosperity and predicted that this would be one of the best sections of the country for electric refrigeration development. One hundred and fifty salesmen heard the talk and took notes freely.

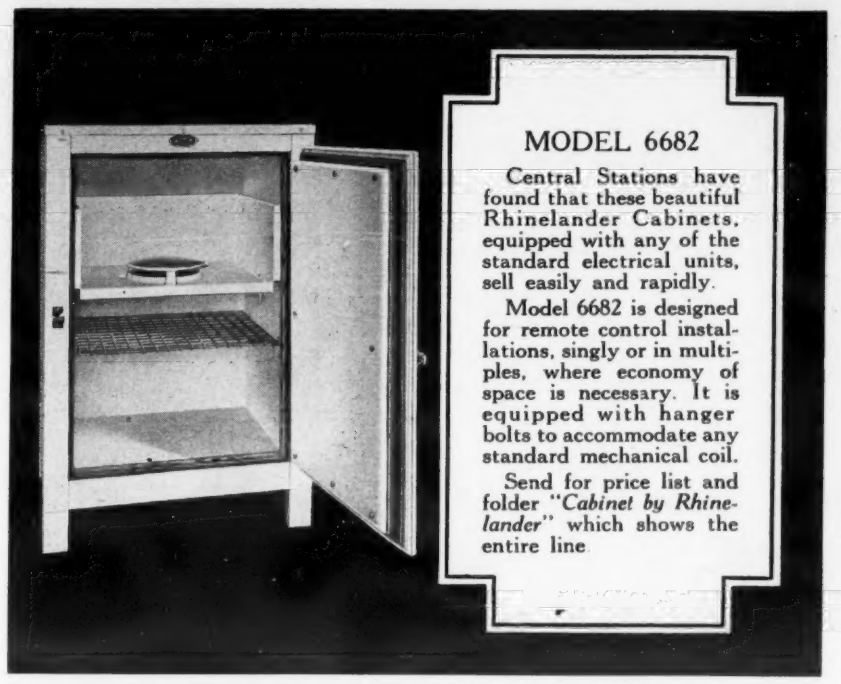
The Storz refrigeration department has grown 100 per cent in three months and promises to be a contestant for first place in the electric refrigeration field of Nebraska this year.

Other prominent electrical men present for the convention were F. H. Brooks, vice-president and general manager, Iowa-Nebraska Light and Power Co. of Lincoln. C. A. Nash, general sales manager of the United Light and Power Engineering and Construction Co. of Davenport, Iowa, and C. W. Amidon, president of the Central Power Co., of Grand Island.

Central Stations Are Selling

RHINELANDER MADE A LITTLE BETTER AIRTITE THAN SEEMS NECESSARY REFRIGERATORS

Equipped with any Standard Electrical Unit



MODEL 6682

Central Stations have found that these beautiful Rhinelander Cabinets, equipped with any of the standard electrical units, sell easily and rapidly.

Model 6682 is designed for remote control installations, singly or in multiples, where economy of space is necessary. It is equipped with hanger bolts to accommodate any standard mechanical coil.

Send for price list and folder "*Cabinet by Rhinelander*" which shows the entire line

RHINELANDER REFRIGERATOR CO.
RHINELANDER, WISCONSIN

Please send your folder "Cabinet by Rhinelander," and Price List.

NAME _____

ADDRESS _____

CITY _____ STATE _____

FEDDERS

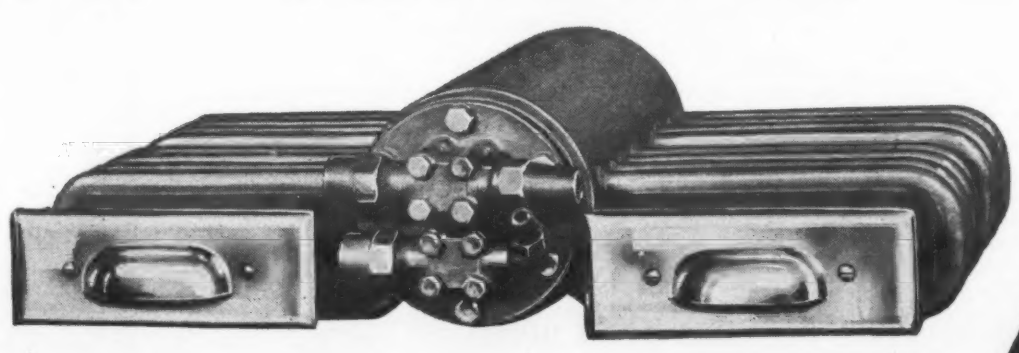
BRINE TANKS
CONDENSERS
EXPANSION
VALVES
FLOAT
EVAPORATORS
EVAPORATOR
HANGERS

STANDARD APPLIANCES

ICE TRAYS
SCALE TRAPS
LIQUID
FILTERS
LIQUID
RECEIVERS
SUCTION
SCREENS

QUALITY ~ EFFICIENCY ~ SERVICE

The FEDDERS ORGANIZATION carries these attributes of a successful business always in mind. Our success depends on your success and while appreciating the splendid business given us in the past, we will strive to merit your continued approval by installing greatly increased production facilities and an engineering personnel. The Fedders Standard Appliances are dependable and are backed by a financially responsible and well organized Corporation which is keenly alive to its responsibility to the small machine Industry.



AIRWAY CONDENSERS

Making condensers and radiators has been our business for more than thirty years.

We will be glad to cooperate with your own Engineering staff in suggestions of a constructive nature to improve, if possible, the operating efficiency of your unit.

FLOAT EVAPORATORS

The Fedders line of float controlled evaporators, or boilers, is unsurpassed in appearance, or inherent quality of workmanship and materials. A greatly increased line of domestic boilers is ready for the market.

SEND FOR SALES BULLETINS

FEDDERS MFG. CO.
Buffalo, N. Y.
F. B. RILEY
Factory Representative
320 Beaubien St., DETROIT, MICH.

LASSEN — TEMPERATURE — PRESSURE — CONTROLS

POSITIVE RANGE AND DIFFERENTIAL ADJUSTMENT
NON-DETERIORATING MERCURY TUBE SWITCH—MEET ALL REQUIREMENTS

GOODNOW & BLAKE MFG. CO. 3840 BEAVER STREET DETROIT, MICH.

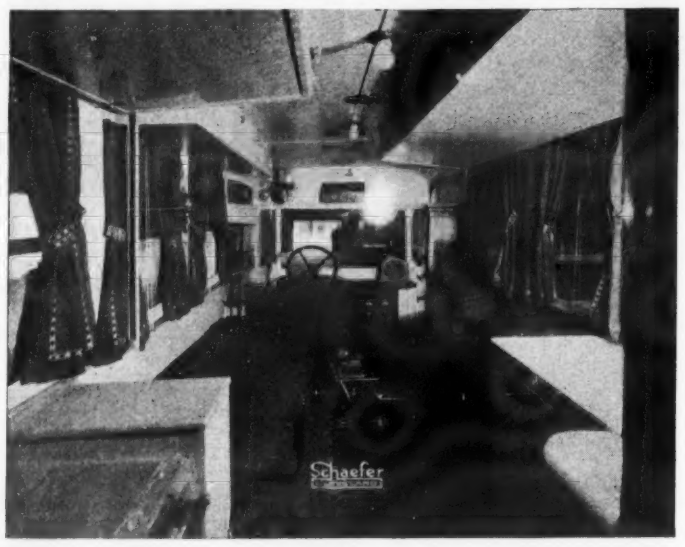
HOUSE CAR HAS REFRIGERATION, RANGE & SHOWER

Storage Battery Supplies 32-Volt Current

For those restless individuals who move from place to place about the country as the urge comes upon them and who at the same time insist on having all of the conveniences of the modern home, house cars of the type shown here are made available by the Gustav Schaefer Wagon Company, Cleveland, O.

Travelers of the type who are financially able to lead this sort of life, are generally accustomed to all modern appliances and as can be seen from the interior view shown here, the manufacturer has attempted to incorporate as many of these as possible in his product.

The proper preservation of food here again is of prime importance and is provided for by a refrigerator which can be seen in the lower right hand corner of the interior view and which is Frigidaire equipped. Current is supplied for the compression unit by a 32 volt 3000 watt type electric generator driven by the truck's motor. Current is supplied when the car is idle by a 32 volt storage battery.



Interior of car showing electric refrigerator in lower right-hand corner

Among the other unusual features of this traveling home is a bathroom with hot and cold water for a shower bath, a 12 inch electric exhaust fan, a radio with loop antenna, and an all electric special 32 volt range for cooking, baking and broiling.

The chassis on which the body shown here is mounted is a G.M.C. truck with 32 by 6 inch pneumatic tires.

Modern Conveniences for Cross-Country Travel

Schaefer House Car

Will Make Refrigerators in New York City

Canaday Coolers Co., 1270 Broadway, New York City, has been incorporated to make electric refrigerators.

Lallerstadt Holmstrom, 19 West 44th St., New York City, has been incorporated to make refrigerators.

H. K. Mohr Advanced by Philadelphia Electric Co.

Howard K. Mohr, for many years advertising manager of the Philadelphia Electric Co., has been made assistant to the president. He is succeeded as advertising manager by Clara H. Zillessen who has been assistant advertising manager.

Houston Salesmanship Club Hears Frigidaire Man

Walter W. Short, vice-president and city sales manager for Cox & Blackburn, Frigidaire distributors, Houston, Texas, addressed the Salesmanship Club of that city at a luncheon, March 30, on the subject of "Preservation of Food."

Attended Frigidaire Sales School in Toronto

K. C. Millikin, merchandise manager of the Dominion Power and Transmission Co., Ltd., Hamilton, Ont., has recently returned from a sales school in Toronto which he attended with eight of their sales staff.

WHEELING ROTARIANS HEAR TALK ON REFRIGERATION

Over one hundred and twenty-five members and guests of the Rotary Club, including the Honorable Howard M. Gore, Governor of West Virginia, attended an electric refrigeration luncheon at the McClure Hotel, Wheeling, West Virginia, recently, at which W. N. Hogan, local General Electric distributor was given charge of the program.

One of the features of the luncheon was the passing of cigars. Customarily the passing of cigars at a Rotary luncheon is a ceremony to denote the pride and dignity of the father of a new arrival. However, Mr. Hogan was careful to explain in his introductory address that the new baby, the General Electric Refrigerator, was in their midst.

R. H. Ferguson, district representative addressed the luncheon on the "Value of Refrigeration."

An interesting result of the Rotary luncheon was the placing of a General Electric Refrigerator in the McClure Hotel Barber Shop.

Complete Direct-by-Mail Campaign Outlined In New G. E. Prospectus

"The Entering Wedge" is the title of a prospectus issued by the General Electric Co., Refrigeration Department, at Cleveland, Ohio, presenting a three piece direct-by-mail campaign which is described as "A plan to drive a wedge deeply into the home of every good prospect in your community—an entering wedge that opens the door for resultful personal salesmanship."

The plan as described in detail, covers the building up of a good list of prospects, the selection of those who are to receive the direct-by-mail campaign, the use of the mailing pieces and a general description of how to operate the group plan of mailing and personal calls.

Tullar Appointed Manager of G. E. Patent Department

Appointment of Charles E. Tullar as manager of the patent department of the General Electric Company has been announced by A. G. Davis, vice-president. Mr. Tullar, who has been assistant manager of the department since December 27, 1927, succeeds A. D. Lunt, deceased.

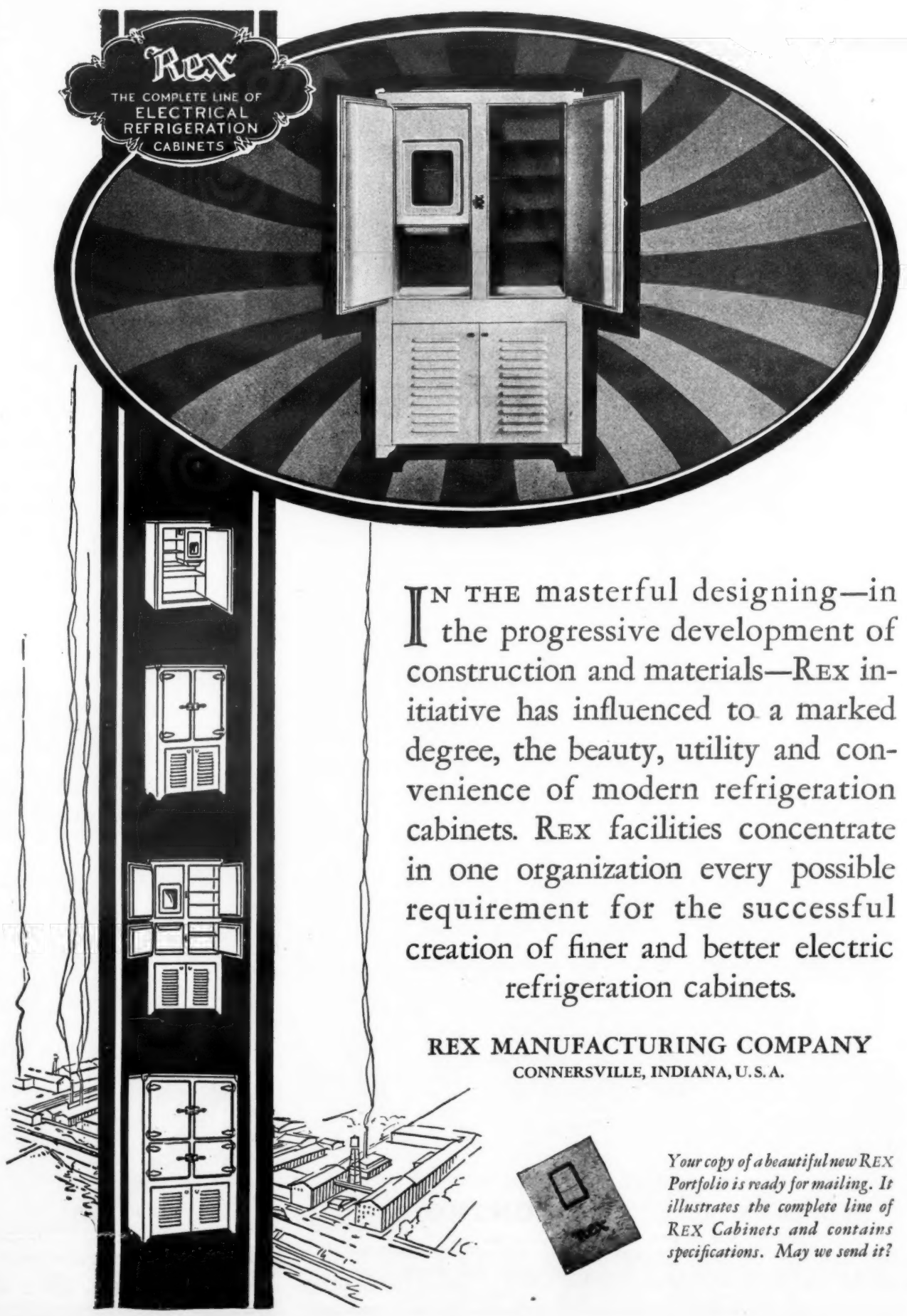
White Rock Samples are Chilled by Electric Refrigeration

General Electric refrigerator in the laboratory of the White Rock Mineral Springs Co., at Waukesha, Wis. Installation by Wisconsin Electric Refrigeration Co., 235 South St., Waukesha, Wis.

WAGNER MOTORS FOR ELECTRIC REFRIGERATION
Wagner Small Motors meet the refrigeration standard—mechanically quiet—built to close tolerances. Available in ratings from 1/6-hp. to 1½-hp.
TEN PROMINENT USERS
Frigidaire Corp. — U. S. Air Compressor Co.
Kelvinator Corp. — Duro Pump Co.
Universal Cooler — Preferred Oil Burners, Inc.
Iron Mountain Co. — National Refrigerarion Corp.
Merchant & Evans — American Blower Co.
Wagner Quality
WAGNER ELECTRIC CORPORATION
6400 Plymouth Avenue St. Louis U. S. A.

FLINTLOCK CONDENSERS
Efficient—Economical
Compact
Greater Efficiency at Less Cost
WRITE FOR OUR BOOKLET
FLINTLOCK CORPORATION
4461 W. Jefferson Ave.
DETROIT, - - MICH.

Rex
THE COMPLETE LINE OF ELECTRICAL REFRIGERATION CABINETS



IN THE masterful designing—in the progressive development of construction and materials—REX initiative has influenced to a marked degree, the beauty, utility and convenience of modern refrigeration cabinets. REX facilities concentrate in one organization every possible requirement for the successful creation of finer and better electric refrigeration cabinets.

REX MANUFACTURING COMPANY
CONNERSVILLE, INDIANA, U.S.A.

Your copy of a beautiful new REX Portfolio is ready for mailing. It illustrates the complete line of REX Cabinets and contains specifications. May we send it?

Joe Murphy's Famous "Ice House Quartette" Will Entertain A. S. R. E. in Detroit

The "quartette" is composed of twenty-four of Toledo's business and professional men, who possess unusually good voices. As they will average three or four engagements per week, they never need a rehearsal. They have sung at over three hundred places—churches, schools, colleges, fraternal societies, luncheon clubs, civic gatherings, conventions, etc., never charging for their services. In addition to many entertainments in the towns in the vicinity of Toledo, they have journeyed to Dayton, Columbus, Detroit and Chicago and have sung before the Rotary Clubs there. They have broadcasted over the Detroit *News*, W. W. J., over W. J. R., W. G. N. and W. E. A. F., the latter with Roxy's Gang; also over "Petit Parisienne" in Paris.

In June last year they toured Europe, visiting six countries: England, Belgium, Holland, Germany, Switzerland and France. In Belgium they sang before King Albert and at the international convention of Rotary Clubs in Ostend and Paris. Their songs were recorded by the Odeon Company in Paris, and are on sale in the United States.

The Ice House Quartette embodies practically all of Toledo's Church soloists, including the Methodist, Lutheran, Congregational, Baptist, Presbyterian, Episcopal, Jewish, Unitarian, Christian Science and Catholic. On the Leviathan they sang the full services on the Sunday of the Baptist and Church of England, also the Catholic High Mass.

Their repertoire consists of Sacred Music as well as Grand Opera, Negro Spirituals, and even "Barber Shop Harmony." At times they appear in their Ice Men's Uniforms, as they are the outgrowth of a hobby of their leader, Joe Murphy, president of The Citizens' Necessities Company of Toledo.

NAMES 5 IMPORTANT POINTS IN PACKING GOODS FOR EXPORT

"Second only to the problem of getting paid for goods exported to foreign countries is that of seeing that the goods are packed in such a manner that they will arrive in sound condition and at the same time rate as low a shipping cost as possible," declared Paul L. Grady, secretary-treasurer of the National Association of Wood Box Manufacturers, in an address before the National Foreign Trade convention at Houston, Texas, as reported in *Printers' Ink*.

According to Mr. Grady a single method of packing is not likely to be suitable for all countries since the absence of good port facilities will, in many cases, necessitate packing of a special character.

Slight changes in the design of a product permitting it to be nested and therefore reduced in volume will, in many cases, cut the export shipping cost very materially.

In selecting a container Mr. Grady names six important factors which the exporter must keep in mind:

1. It must be adequate to protect against damage from handling, which includes reasonable assurance from punctures.
2. It must be of such construction as to discourage pilfering.
3. It must offer protection against climatic changes and adverse weather conditions.
4. Its effect upon transportation and insurance costs.
5. Its effect upon the import duties of the country of destination.
6. Cost.

DINNER MARKS APPOINTMENT OF ELIZABETH, N. J., DEALER

Celebrating the organization of the firm of Hertzel & Harrison to act as agent for General Electric refrigerators in Elizabeth, N. J., more than 250 representatives and dealers of the Philip H. Harrison Co., distributors for Northern New Jersey and Northampton County, Pa., met in the auditorium of the Elizabeth Elks Club on May 22.

The address of welcome was made by Frank H. Driscoll, publicity manager for Philip H. Harrison & Co. The principal speaker of the evening was Philip H. Harrison, who spoke on organization and its power. The addresses of P. B. Zimmerman, sales manager, and T. K. Quinn, general manager of the Electric Refrigeration department of the General Electric Co., at Cleveland, were followed by motion pictures showing the manufacture of the General Electric D R-2 icing unit.

Following the dinner a program of entertainment was presented through the courtesy of the New York Theatrical Guild.

G. E. Dealers Appointed for Lebanon and Marionville, Mo.

The Hurlburt Supply Co., 315 St. Louis St., Springfield, Mo., announces the appointment of G. C. Moulder, Lebanon, Mo., and U. L. Coleman Hardware Co., Marionville, Mo., as General Electric refrigerator dealers. The Moulder store carries a line of radio sets and musical instruments and adds electric refrigeration to fill in the natural slump during the summer months.

Frigidaire Dealers Attend Meeting at Wilkes-Barre, Pa.

Approximately 50 Frigidaire dealers attended a district convention held at the Hotel Sterling in Wilkes-Barre, Pa., May 16. The meeting was held under the auspices of the David Electric Co., of Wilkes-Barre.

King-Mantel Appoints Knoxville Sub-Dealer

The Radio & Electric Service Co., Knoxville, Tenn., has been appointed Kelvinator sub-dealer to operate under the King-Mantel & Furniture Co., also of Knoxville.

TRADE
EXTRA DRY ESOTOO
MARK
THE PUREST
SULPHUR DIOXIDE
Analysis Guaranteed
We have an agent, with our product in stock, near you
Wire us where we can serve you
VIRGINIA SMELTING CO., WEST NORFOLK, VA.
F. A. EUSTIS, *Secretary* 131 STATE ST., BOSTON 2 RECTOR ST., NEW YORK

Welcome to DETROIT A. S. R. E.

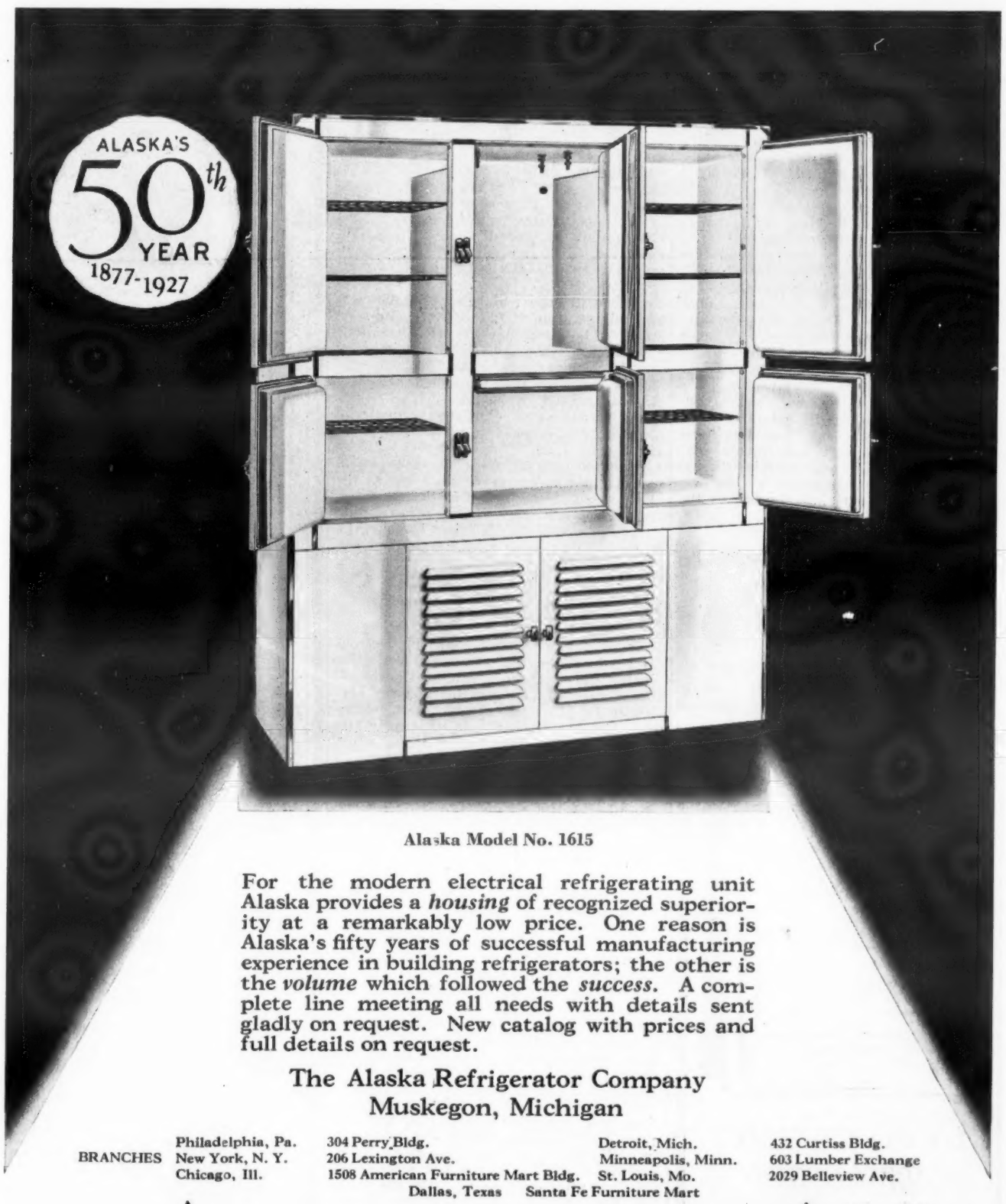
The Commonwealth Brass Corporation welcomes the American Society of Refrigeration Engineers to Detroit and extends a cordial invitation to inspect, during your visit, our facilities for manufacturing quality brass fittings.

For many years we have specialized in the manufacture of small fittings for connecting brass and copper tubing. We are now producing a complete line of fittings made from brass forgings, especially designed to meet electrical refrigeration requirements.

Dependable fittings are a vital part of any mechanical refrigeration installation. Visit our plant and learn firsthand what we are doing for you in this respect. Consult the centerspread of this paper for our location on the Detroit city map.

FORGED NUTS
Manufactured in a complete range of sizes from ¼" to and including ⅝".

COMMONWEALTH BRASS CORPORATION
DETROIT 5781-5835 COMMONWEALTH AVE. MICH.



Alaska Model No. 1615

For the modern electrical refrigerating unit Alaska provides a *housing* of recognized superiority at a remarkably low price. One reason is Alaska's fifty years of successful manufacturing experience in building refrigerators; the other is the *volume* which followed the *success*. A complete line meeting all needs with details sent gladly on request. New catalog with prices and full details on request.

The Alaska Refrigerator Company
Muskegon, Michigan

BRANCHES
Philadelphia, Pa. 304 Perry Bldg.
New York, N. Y. 206 Lexington Ave.
Chicago, Ill. 1508 American Furniture Mart Bldg.
Detroit, Mich. 432 Curtiss Bldg.
Minneapolis, Minn. 603 Lumber Exchange
St. Louis, Mo. 2029 Belleview Ave.
Dallas, Texas Santa Fe Furniture Mart

ALASKA
Cork-Board Insulated
ELECTRIC CABINETS

KELVINATOR PLANT SETS NEW RECORD OF 1,000 UNITS A DAY

Goss Predicts New High Output For All Companies in 1928

Kelvinator Corp. has reached a record daily production of 1,000 complete units a day as compared with a high mark of 600 units a day in April, according to A. H. Goss, chairman of the board, Kelvinator Corp., Detroit, Mich., in a recent interview in which he was asked regarding the company's condition and the outlook for the industry. All indications, said Mr. Goss, point to a new high output of electric refrigeration units for 1928, with four leading companies of the industry doing approximately 90 percent of the business.

Sales of Kelvinator commercial equipment show a larger percentage gained than sales in household units. The largest percentage gained, compared with the previous year, is in the export field.

With the closing of the June quarter, said Mr. Goss, Kelvinator Corporation will be free of all bank loans, will present a good earnings statement and will have a strong cash position. The peak of the inventory liquidation period will not be reached until July, so that the company should have a large cash reserve at the close of the fiscal year ended September 30.

The readjustment through which the electric refrigeration industry passed during 1926 and the early part of 1927 has run its course, Mr. Goss stated, and has served the purpose of stabilizing sales, prices and trade conditions, and in concentrating the manufacture of efficient units in the hands of a small number of financially strong corporations which are equipped to operate on volume production at low cost.

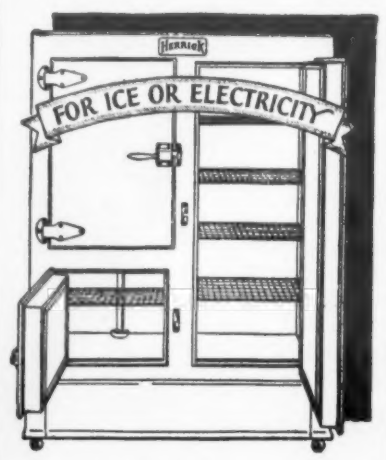
BENJAMIN OFFERS ALL-PORCELAIN REFRIGERATOR DISHES IN COLORS

In keeping with the recommendation made by authorities on refrigeration and home economics that refrigeration to reach its highest point of efficiency should have all foods kept in covered containers, the Benjamin Electric Mfg. Co., 128 So. Sangamon St., Chicago, is now offering all-porcelain refrigerator dishes in one-quart and one and one-half quart sizes. A wide range of colors, either in a conservative white porcelain with black trim or in green, blue, red, yellow, cream or gray, which fit in nicely with today's wide use of color in the kitchen, are offered.

The two greatest advantages obtained through use of these dishes are: They prevent foods from drying out—thus retaining their original freshness and flavor for longer periods of time; and they guard against one food absorbing the odor of another. For instance—dairy products and liquid foods when placed in covered containers will not absorb the odors of such foods as fish or onions. Then, too, these dishes are unbreakable and prove very easy to clean. They also permit full use of refrigerator storage space, as the bottom of one dish nests into the top of the other.

Warwick Electric Co. Has Sold 70 Units Since Jan. 1

The Orange and Rockland Electric Co., Warwick, N. Y., has sold 70 General Electric refrigerators since January 1. From May 1 to May 9 an average of one refrigerator sale a day was made.



It's the CABINET that Counts!

Best results will be obtained if your unit is installed in the HERRICK

HOUSEHOLD *and* COMMERCIAL REFRIGERATORS

For Electric Refrigeration

HERRICK REFRIGERATOR CO.
1019 Cedar St., Waterloo, Iowa.

POLITICAL TALK IMPEDES SALES IN HOUSTON

Being host to the National Democratic Convention is apparently a serious matter for the citizens of Texas, or at least a number of electric refrigeration distributors are finding it so. Several with headquarters in Dallas have complained in the last few weeks that when calls are made on dealers in the smaller towns the men are so busy talking politics that they cannot get down to business.

"Right now the tendency seems to be to let business 'ride' until after the national convention at Houston in June," according to one distributor who has spent considerable time recently in various sections of North Texas. "The small town dealers seem to be no more unwilling to miss their own local sales than they are to be 'sold' by the distributor—as long as they get to talk politics," he said.

CONFERENCE TO CUT NUMBER OF ICE CAKE SIZES

(*Concluded from Page 1, Column 4*)

sions in each case, primarily for the guidance of refrigerator manufacturers. No individual ice cake in the weights above listed will be of such size that all three dimensions are a maximum, but any one dimension, and in some instances any two, may be a maximum. Ice cakes now cut to the above weights from any existing standard size cake of manufactured or natural ice in no case exceed the maximum dimensions listed.

The committee strongly recommends scoring of ice for all cuts, for the purpose of assuring standard weight to the user and discouraging irresponsible competition among distributors.

History of the Work

For a number of years manufacturers, distributors and users of household refrigerators have realized that growing diversity in over-all and other dimensions of these products was causing increased costs, waste and inconvenience to all concerned. At the suggestion of manufacturers and others directly interested, the Division of Simplified Practice began in December, 1926, to secure opinions from refrigerator manufacturers and from other branches of the refrigeration industry, including distributors and users. Architects and refrigeration engineers were also consulted. The great majority of all opinions and suggestions, measured both by number and by volume of business represented, clearly indicated that unnecessary variety existed, and that it was possible to reduce such variety and eliminate immaterial differences in dimension, to the benefit of all concerned.

After a number of conferences with manufacturers, engineers and users, the Division of Simplified Practice called a preliminary conference of all refrigeration interests on July 27, 1927, in Cleveland, O. After full discussion of the various phases of the subject, the following Simplified Practice Committee was appointed to study the subject in detail and to formulate definite recommendations:

George B. Bright, American Society of Refrigerating Engineers, chairman, Detroit, Mich.; C. C. Spreen, chief engineer, Kelvinator Corp., Detroit, Mich.; Charles J. Gibson, president, Gibson Refrigerator Co., Greenville, Mich.; Leslie C. Smith, secretary, National Association of Ice Industries, Chicago, Ill.; J. Blair Eastor, Keystone Refrigerating Co., Beaver Falls, Pa.

Ex officio: LeRoy E. Kern, technical secretary, American Institute of Architects, 19 West Forty-fourth St., New York; R. L. Lockwood, Division of Simplified Practice, Washington, D. C.

The conference voted in favor of establishing a simplified list of over-all dimensions, particularly widths, for not more than five standard nominal sizes of household refrigerators, either mechanically or ice cooled. At the first meeting of the Committee, held on August 26, 1927, it was decided that in order to establish standard maximum over-all dimensions, it would be necessary to first develop standard dimensions for ice cakes, ice compartment and door sizes, location of hanger bolts and sleeves, and over-all dimensions of mechanical cooling units.

A careful survey of existing ice cake sizes was immediately begun as the first step. Concurrently, other data was secured by the Committee for future use in subsequent steps. At the last meeting of the Committee on May 18, 1928, the above list of weights and dimensions was agreed upon as adequately covering all ordinary needs for household refrigerators. The general conference on June 13, 1928, is therefore being called to act upon the recommendation and thereby complete the first necessary step in the program.

The Committee proposes to undertake the second step immediately thereafter, and has already collected a large quantity of data for that purpose, but in order to establish nation-wide standards of dimension for cooling compartments and door openings, the adoption of definite standards of weights and maximum dimensions for ice cakes is essential.

COPELAND ADDS 178 NEW DEALERS IN MAY

One hundred and seventy-eight new dealer outlets were added during May by the Copeland Products, Inc., Detroit, manufacturers of electric refrigeration, it was announced today by W. D. McElhinny, vice-president in charge of sales. Of these the largest number, 28, was in New York. Nineteen were added in Missouri, Pennsylvania and the state of Washington, while 15 were added in Illinois. Arrangements have just been completed with the W. S. Nott company of Minneapolis as distributor in that district and with H. G. Parsons of Amarillo, Tex.

Little Rock Firm Named State Distributor for Electrolux

Electrolux refrigerating units are to be sold in Little Rock, Ark., by the Sherman Supply Co., 822 Main St. This company will be state wholesale and retail distributors and branches will be opened in other Arkansas cities. Dave Sherman is president and Saul S. Harris secretary-treasurer.

Rochester Distributor Opens Second Show Room

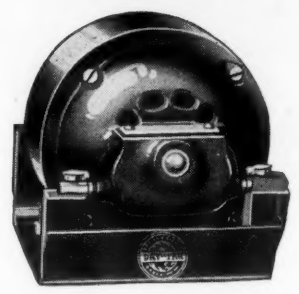
The Wheeler Refrigerator Corp., Rochester, N. Y., distributors of General Electric refrigerators, has recently opened a new showroom at 260 East Avenue. The company also maintains a show room at 33 St. Paul St.

Electro-Kold Reports Orders Running 75% Ahead of Schedule

Electro-Kold Corp., Spokane, Wash., is experiencing a healthy increase over last year's volume of business with orders running about 75 percent ahead of the budget figures according to H. L. Masterson, vice-president of the company. During the week starting May 21, E. S. Matthews, sales manager of Electro-Kold Corp., held a series of sales meetings in Seattle, Wash., and Portland, Oregon.

ARTIFICIAL FOODS
Endorsed By
General Electric Co.
Copeland Sales Co.
Trutulife Wax Products Co.
27 Erie St., Milwaukee, Wis.

Day-Fan
RADIO · MOTORS · FANS
PRODUCTS

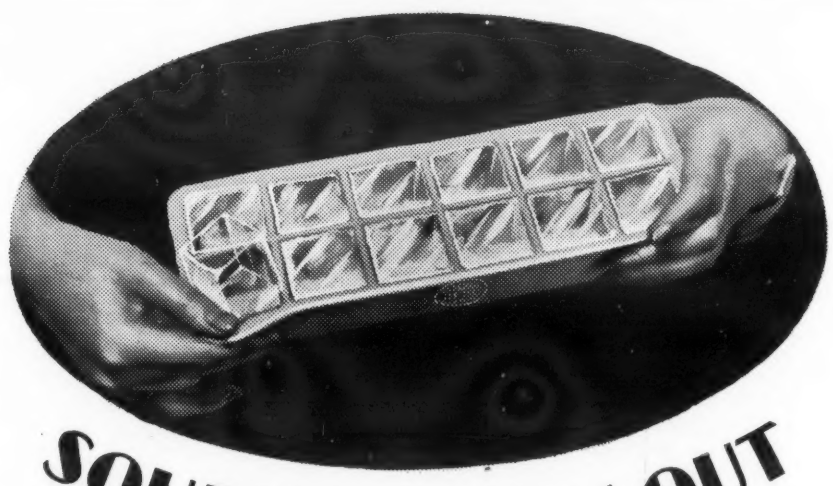


ELECTRIC REFRIGERATION WILL BE INTRODUCED TO A HALF MILLION NEW HOMES IN 1928

The great majority of this multitude know very little about motor repair or adjustment—don't care to know—and when the electric refrigerator is Day-Fan Motor equipped—the operation will be care-free and trouble-proof. Important to manufacturers is its low initial cost.

Sample test motor shipped to manufacturer on request.

THE DAY-FAN ELECTRIC COMPANY
DAYTON, OHIO



SQUEEZE THEM OUT

Ice Cubes *Can't* Stick to the

COPEMAN ICE TRAY
PATENTED

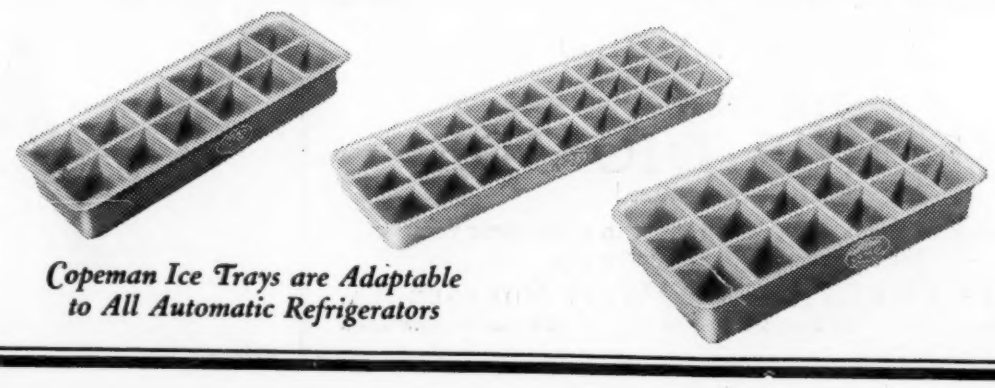
NO more blasting to get ice cubes out of automatic refrigerator trays. The new Copeman Ice Tray does away with the trouble and annoyance of heating, prying and digging to loosen ice cubes from metal trays. The cubes *must* come out—because they can't stick to the sleek, white sides of the Copeman Ice Tray.

By using pure white rubber the Harwell Rubber Co., Inc., make this convenient, temper-saving new tray that can be emptied of one or all of its cubes in an instant—merely by a twist of the flexible rubber tray.

Automatic refrigeration is saving ice-box inconveniences in thousands of homes; now it can save time, temper and trouble with the marvelous new Copeman Ice Tray.

Prices and Information On Application

HARWELL RUBBER CO., INC.
Sole Manufacturers and Distributors
5 E. 44th Street, New York



Copeman Ice Trays are Adaptable to All Automatic Refrigerators

American Electric Company Participate in Builders' Exhibit

"St. Joseph, Mo., is talking 'General Electric' Refrigerators," according to H. L. Schumtz, manager of the Refrigeration Department of the American Electric Company at St. Joseph, Mo.

This is the result of a display at the National Builders' Exhibit held early in April. The particular success of this exhibit was achieved by means of a number of machines distributed throughout other booths. Four General Electric Refrigerators were displayed by Townsend, Wyatt & Wall, one of the largest department stores in St. Joseph; the Roy M. Jackson Plumbing Company had one machine in their booth; in the model kitchen of the St. Joseph Light, Heat & Power Co. a General Electric was on display.

From ten to fifteen men were busy constantly afternoon and evening, during the six days of the show. A number of refrigerators were sold direct from the floor, and again as many sales made during the week have been traced to the booth display.

Middle West Merchandise Sales Total $163,831.10 in Week Ending May 19

Sales of electrical appliances, including electric refrigerators, made by the subsidiary companies of Middle West Utilities Co. during the week, May 12-19, amounted to $163,831.10, with greatest sales by West Texas Utilities Co., Wisconsin Power & Light Co. Southwestern Gas & Electric Co., Kentucky Utilities Co., Interstate Public Service Co., Central Power & Light Co., and Central Illinois Public Service Co. divisions.

70 Sales in One Month by Virginia Public Service Co.

The Southern Division of the Virginia Public Service Co., with headquarters in South Boston, sold 29 electric refrigerators and 13 ranges in the month, April 25 to May 25. Seventy refrigerators and forty-five ranges have been sold in this territory so far in 1928.

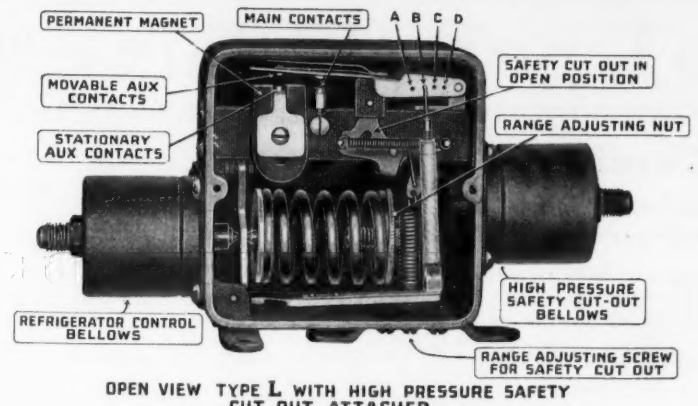
"Electric Circus" Shows Refrigerators in Action

Michigan Electric Power Co., a subsidiary of Middle West Utilities Co., is showing in twenty-nine communities of Michigan a traveling exhibit of all electric household appliances, designed to depict modern economical housekeeping methods.

Refrigerator Sales Double in Nebraska Territory

Central Power Co., of Nebraska, distributing in Grand Island, Kearney, Hastings, St Paul, Ravenna and Nebraska City, sold 38 electric refrigerators in the first 4 months of 1928 against 19 for the same period last year, St. Paul and Kearney falling into first and second place.

NEW PENN COMBINATION CONTROL and SAFETY SWITCH for REFRIGERATIVE UNITS



OPEN VIEW TYPE L WITH HIGH PRESSURE SAFETY CUT OUT ATTACHED

The Penn Electric Switch Co. now offers their regular Type L Magnet switch, provided with a high pressure safety cut-out, in addition to the regular temperature or pressure controlling mechanism, all in one compact unit. (See Cut). The high pressure diaphragm is to be connected to the discharge side of the refrigeration system. In case an excess pressure is built up, due to any cause whatsoever, the safety feature opens the switch and stops the unit. When normal pressure has again been restored, this feature will permit the switch to close and the unit will continue to operate.

The operation of the high pressure safety element and controlling mechanism are entirely independent and in no way affect each other.

This combination control and high pressure safety switch can be furnished for pressure or temperature controlled systems using any of the usual refrigerants—excepting ammonia.

We solicit inquiries from manufacturers and others interested in such a control.

PENN ELECTRIC SWITCH CO., Des Moines, Iowa

SILICA GEL CRYSTALS APPLY PRINCIPLE OF CAPILLARY ATTRACTION

Little amber colored crystals which "pack a punch" as powerful as a motor attract much interest at the N. E. L. A. convention. They are crystals of Silica Gel, a new substance which harnesses the principle of capillary attraction and puts it to work. Bottled they look like bath salts. Confined in business-like steel tubes as a unit of a refrigeration machine they kept that machine at an even temperature of about 40 degrees.

They were exhibited by the Copeland Products, Inc., of Detroit, to acquaint central station men with the newest thing in refrigeration. For the manufacture and sale of this machine, the Copeland Products, Inc., has acquired exclusive rights from the Silica Gel Corp., of Baltimore, a subsidiary of the Davison Chemical Company, and has formed a new subsidiary company, known as the Copeland-Silica Gel Corp. to handle this product, utilizing, however, the present Copeland executive organization.

In artificial refrigeration, a liquid is evaporated quickly, then returned to its natural state and the process repeated. Evaporation is caused by the liquid taking the heat out of its surroundings, just as water takes the heat out of the fire under it and bursts into steam. Only the liquid used in this process boils, or vaporizes, at a much lower temperature. Thus if the boiling point is 12 degrees, when the temperature around the liquid exceeds this point it will vaporize, or boil.

To return this vapor to liquid, pressure is applied in the usual type of machine, through a compressor. It is this compressor, which Silica Gel replaces. The Gel through its power of capillary attraction, sucks up, or adsorbs the vapor. When thoroughly saturated, heat is applied and the gas forced out of it into the condenser, where it is returned to liquid. Thus the gel replaces the compressor unit and eliminates the use of all moving parts in the refrigeration cycle. The only moving part is a small electric fan, which is used to cool the condensing unit. Control of the heating burner is through a time clock arrangement, which can be set to keep the cycle even and activate the gel just at the proper time.

CENTRAL STATION MEN SEE REFRIGERATION AS GREAT LOAD BUILDER

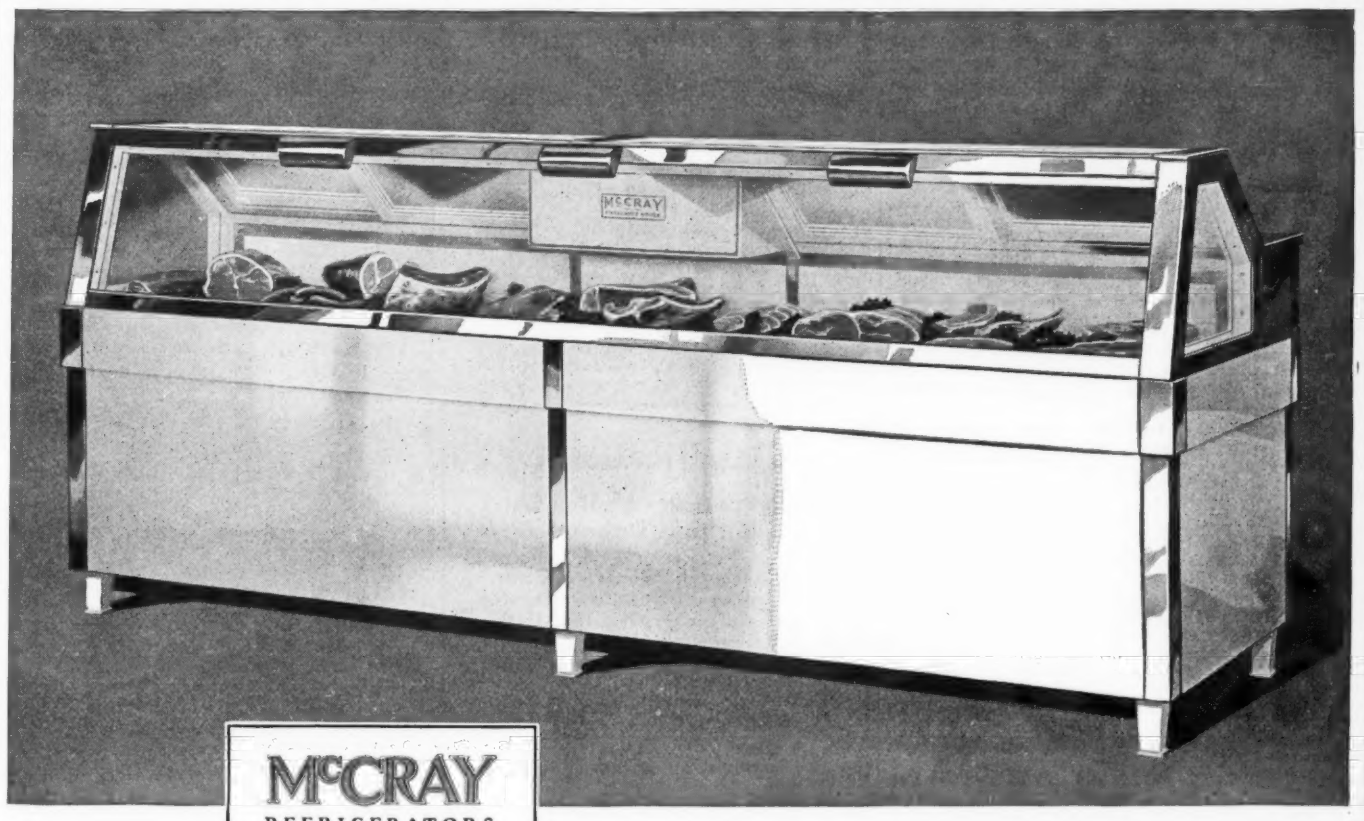
(*Concluded from Page 6, Column 3*)

of attractive domestic models, taken from their line, and covering all sizes from the smaller domestic boxes to the extreme capacity unit which is suitable for commercial use in hotels, restaurants, etc. A large portion of the Savory exhibit is given to their other specialties which are not within the refrigerator field, but the ensemble is attractive and striking in its arrangement. The personnel in charge are W. H. Campbell, E. A. Phillips, and F. H. Schrage, and the spaces 239 and 241 are most advantageously placed a few yards from the entrance and at the left of the aisle.

The Superior Company, of Canton, exhibit three domestic units from their line, and while the showing is small, the arrangement and display is inviting, especially to those women who individually prefer tall models with their high shelves and smooth lines. The personnel of the exhibit could not be learned at time of going to press.

The public appears to be greatly interested in the refrigerator showings, and there was a marked density around the various spaces where the various automatic refrigerator exhibitions were placed on the afternoon of Monday.

WORLD'S LARGEST MANUFACTURER OF REFRIGERATORS FOR ALL PURPOSES



McCRAY
REFRIGERATORS
FOR ALL PURPOSES
For
Grocery Stores·
Meat Markets·
Hotels · Restaurants · Hospitals·
Institutions··
Florist Shops·
Homes · · · ·

A New McCRAY

Built Especially for Use with Electric Refrigeration

NOW WE PRESENT McCray's newest achievement, the finest refrigerator unit for stores and markets in all McCray history! And it is especially built for electric refrigeration of any type.

Notice first of all its striking appearance . . .gleaming white porcelain, clear plate glass, mirror-like Monel metal trim! Then consider the unequalled display—electrically lighted—which it affords. Not a single obstruction across the entire front! And the absolute cleanliness, perfect sanitation which it assures. Surely, here is a case which will bring you more business.

Remember, too, with all these striking new features there is the old reliable McCray system of refrigeration, the staunch construction in every hidden detail, the pure corkboard insulation sealed with hydrolene cement, which keeps foods perfectly at exceedingly low operating cost.

Here is time-tested McCray refrigerator service, proved in actual use for over a third-of-a-century. . .offered to you in a refrigerator case which strikingly marks your store as *the store ahead*.

Built for ELECTRIC REFRIGERATION of any type. May be used with ice, if preferred. SEND COUPON Now for further details of the new McCray Display-All Refrigerator Case No. 104, and how it will make more money for you. Get the facts about other styles to meet your particular needs. Remember, McCray builds refrigerators for every purpose.

SALESROOMS IN ALL PRINCIPAL CITIES
(See Telephone Directory)

We invite correspondence from dealers in electric refrigeration about the profit-making possibilities in McCray cooperation.

McCRAY REFRIGERATORS

McCray Refrigerator Sales Corporation, Dept. 66, Kendallville, Ind.
Gentlemen: Please send free book [ ] "How to Make More Money in Food Retailing." Also, without obligation, send information about refrigerators [ ] the New 104 Display case and counter, [ ] other refrigerators for grocers, [ ] for meat markets, [ ] for restaurants and hotels, [ ] hospitals, institutions, [ ] florist shops, [ ] homes.

Name_____
City_____
State_____

VALVES
KEROTEST
FORGED BRASS VALVES
for Mechanical Refrigeration
Quality Shut-off and Cylinder valves in any standard designs or to your specifications.
KEROTEST MANUFACTURING CO.
2525 LIBERTY AVENUE
PITTSBURGH, PENNA.

LIG·O·NIER
Refrigerators
Give your Electrical REFRIGERATION Units a Chance to Prove their Quality!
A Complete Line of Commercial Refrigerators...Counters and Market Coolers.
LIGONIER REFRIGERATOR COMPANY
100 CAVIN ST.
LIGONIER—INDIANA.

FRIGIDAIRE SALESMAN ENDORSES MR. ISRAEL'S COMPLAINT AGAINST G. E.

FRIGIDAIRE
Electric Refrigerating System
Representatives for Central Maryland Exclusive of Baltimore City

Sales and Service, MAY 15, 1928.
Liberty St., Westminster, Md.

ELECTRIC REFRIGERATION NEWS,
Detroit, Michigan.

I read the article on page eight, which you published in the April 25th issue of the ELECTRIC REFRIGERATION NEWS entitled "A Salesman's View of Knocking Competitors."

The writer does not know Mr. Israel who wrote you this letter, but I think he has hit the nail on the head squarely, for it does look so babyish, so small, and unbecoming for a large organization like the General Electric to write ads as they do.

One would think the problem of refrigeration industry was the selling of mechanical appliances rather than the selling of refrigeration service. It is especially unbecoming of an organization with years of experience in building Electric machinery to resort to such tactics. It makes them look like third raters instead of a high-classed principled merchandising organization, and I think A. Israel read them right.

If General Electric had any unusual experience in building refrigeration machinery, and if they had something unusual, it would not be so unbecoming, but such an article as they are merchandising which must be weak in mechanical lines or they would not advertise as they do.

Personally, just as you pictured in your column, if we can sell our customers on the problem of proper food preservation and let the use of the machine judge as to whether any machinery should have a drain pipe to automatically carry drippage from the coil or cheap drain pan to house this poison up in the food chamber until emptied by hand, and so forth, then I think we would be getting somewhere.

Yours very truly,
EDGAR M. FROUNFETTER,
Salesman.

CLASSIFIED DIRECTORY

Refrigeration Systems, Apparatus, Materials, Parts, Accessories, Service and Related Merchandise

Classification A—Automatic, self-contained, refrigeration systems, compression type, operated by electric motor, complete with refrigeration apparatus and refrigerator cabinet (sold and installed as a single unit).

Classification B—Automatic, self-contained refrigeration systems, absorption (or adsorption) type, operated by heat (electric, gas, etc.), complete with refrigeration apparatus and refrigerator cabinet (sold and installed as a single unit).

Classification C—Refrigerating units only, without cabinet. Automatic machines or apparatus, compression type, operated by electric motor, for installation in, or remote from, refrigerator cabinets, cases, coolers, etc.

Classification D—Refrigerating units only, without cabinets, absorption (or adsorption) type, operated by heat (electric, gas, etc.).

Classification E—Refrigerating systems for multiple operation. Automatic machines, compression type, operated by electric motor, for connection with several refrigerator cabinets, cases, coolers, etc.

Classification F—Non-automatic refrigeration systems. Heavy machinery and equipment for commercial installations.

Classification G—Refrigerating apparatus, accessories, materials and supplies (low side).

Classification H—Refrigerating machine parts, accessories, materials and supplies (high side).

Classification I—Controls, regulators, etc.

Classification J—Refrigerator cabinets, cases, coolers, etc. Designed for use in connection with refrigerating machines or apparatus.

Classification K—Refrigerator cabinet materials, parts and accessories.

Classification L—Professional, educational and sales service.

Classification M—Production, installation and service equipment and supplies.

Classification N—Related merchandise.

Classification O—Miscellaneous equipment.

Classification A

Automatic, Self-contained, Refrigeration Systems

Compression type, operated by electric motor, complete with refrigeration apparatus and refrigerator cabinet (sold and installed as a single unit).

(1) Domestic models for homes and apartments.
(2) Commercial models for food stores, restaurants, hotels, cafeterias, delicatessens, etc.
(3) Ice cream cabinet units.
(4) Soda fountain units.
(5) Water cooler units.
(6) Milk cooler units.
(7) Bottle cooler units.
(8) Ice cube maker units.
(9) Vending machine units.
(10) Other special designs or applications. (complete self-contained units).

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

"ABSOPURE" (See General Necessities Corp.)
"ALLISON" (See Domestic Electric Refrigerator Corp.)
"ALPINICE" (See Rauf Mfg. Co.)
AUDRIFFEN REFRIGERATING MACHINE CO., 285 Madison Ave., New York, N. Y. (1, 2)
AUTOLECTRIC ICERATOR CORP., 16 Court St., Brooklyn, N. Y. (1)
BELDING HALL ELECTRICE CORP., Belding, Mich. (1)
BERG MFG. CO., 280 Main St., Gardner, Mass. (1)
BRYANT ELECTRIC REFRIGERATOR CORP., New Milford, Pa. (1)
"CALIFORNIA" (See Hart & Burmeister)
CALVERT ELECTRIC REFRIGERATOR CO., Woodberry, Baltimore, Md. (1)
"CHILRITE" (See Narragansett Machine Co.)
CLEVELAND ICELESS COOLER CO., 971 E. 63rd St., Cleveland, O. (5)
COLDAK CORP., 1775 Broadway, New York, N. Y. (1, 2)
COPELAND SALES CO., 630 Lycaste Ave., Detroit, Mich. (1, 2, 3, 5, 6)
DEER, A. J., CO., Hornell, N. Y. (1)
DEVON MFG. CO., 677 Cambridge St., Worcester, Mass. (1)
DOMESTIC ELECTRIC REFRIGERATOR CORP., 2 West 46th St., New York, N. Y. (1)
"ELECTRICE" (See Belding-Hall Electrice Corp.)
ELECTRO-KOLD CORP., 151 S. Post St., Seattle, Wash. (1, 2)
ELECTRO VACUUM REFRIGERATOR CO., 202 East 43rd St., New York, N. Y. (1, 2)
"EL-FRIG-ETTE" (See Michigan Refrigeration Co.)
ESKIMO REFRIGERATION CO., 914 Columbus Ave., Sandusky, O. (1, 2)
EVERITE PRODUCTS, INC., 200 Davis Ave., Dayton, O. (1)
"FEMCO" (See Fessler Mfg. Co.) (1)
FESSLER MFG. CO., 19th & Central Sts., Kansas City, Mo. (1)
FREEZEL CORP., 483 Main St., Gardner, Mass. (1, 5)
"FRIGERATOR" (See General Necessities Corp.)
FRIGIDAIRE CORP., Dayton, O. (1, 2, 3, 5, 6, 8)
FROST CHILL CO., 2031 Euclid Ave., Cleveland, O. (5)
FROZONE CORP., 106-108 S. 7th St., Philadelphia, Pa. (1)
GENERAL ELECTRIC CO., Electric Refrigeration Dept., Hanna Bldg., Cleveland, O. (1, 5)
GENERAL NECESSITIES CORP., 2011 Park Ave., Detroit, Mich. (1, 2, 3, 5)
GENERAL REFRIGERATOR & MFG. CORP., 411 Kraemer Bldg., Portland, Ore. (1)
HART & BURMEISTER, Jerrold and Napoleon Sts., San Francisco, Calif. (1)
HAVEN MFG. CO., 486 Milwaukee St., Milwaukee, Wis. (1, 2, 6)
HIBBARD CO., 650 Euclid Ave., Cleveland, O. (7)
HVID ICE MACHINE CORP., 38 S. Dearborn St., Chicago, Ill. (1)
ICELECT CORP., 11th & Farnum, Omaha, Nebr. (1)
ICEMASTER CO., Haverhill, Mass. (1)
"ICERATOR" (See Autolectric Icerator Corp.)
IRON MOUNTAIN CO., 939 E. 95th St., Chicago, Ill. (1, 2)
IROQUOIS ELECTRIC REFRIGERATION CO., 1600 Arch St., Philadelphia, Pa. (1)
JACK FROST REFRIGERATION, LTD., 347 Sorauren Ave., Toronto, Ont., Canada. (1, 3)
KELVINATOR CORP., Plymouth Road, Detroit, Mich. (1, 2, 3, 8)
KEOKUK REFRIGERATOR CO., Keokuk, Ia. (1)
KEYSTONE REFRIGERATING CORP., Beaver Falls, Pa. (1)
"KOLD STREAM" (See Cleveland Iceless Cooler Co.)
KULAIR CORP., 4 S. 15th St., Philadelphia, Pa. (1)
"LIHYCO" (See Lindsay, Hyde & Co.)
LINDSAY, HYDE & CO., 2130 E. York St., Philadelphia, Pa. (1)
MECHANA-KOLD CORP., Arcade, New York. (1, 2)
MERCHANT & EVANS, 2035 Washington Ave., Philadelphia, Pa. (1, 2)
MICHIGAN REFRIGERATION CO., INC., 1600 Monroe St., N. W., Grand Rapids, Mich. (1)
"M & E" (See Merchant & Evans Co.)
NARRAGANSETT MACHINE CO., Vale St., Pawtucket, R. I. (1)
"NIZER" (See Kelvinator Co.)
NORGE CORP., 670 E. Woodbridge St., Detroit, Mich. (1)
POLARAIRE ELECTRIC REFRIGERATOR CO., 1610 North St., Philadelphia, Pa. (1)
POLARIS REFRIGERATION CO., Logansport, Ind. (1)
POOLE ENGINEERING CO. (See Calvert Electric Refrigeration Co.) (1)
RAUF MFG. CO., 30 Central Ave., Bogota, N. J. (1, 2)
RICE PRODUCTS, INC., 325 S. Beaubien St., Detroit, Mich. (1, 2)
SCHNEIDER ELECTRICAL WORKS (See Icelet Corp.)
SERVEL SALES, INC., Evansville, Ind. (1, 2, 3, 4, 5, 6, 7, 8)
"SNOW QUEEN" (See Hvid Ice Mach. Corp.)
"SURE COLD" (See Warner Steel Products Co.)
SUPERIOR ICELESS REFRIGERATOR CO., Canton, O. (1, 2)
TRUPAR MFG. CO., 138 Davis Ave., Dayton, O. (1)
UNIVERSAL COOLER CORP., 1214 18th St., Detroit, Mich. (1, 3, 5, 8)
WARNER STEEL PRODUCTS CO., Ottawa, Kans. (1)
WAYNE COMPANY, Ft. Wayne, Ind. (1)
WELSBACH CO., Ellis St., Gloucester City, N. J. (1)
WHITEHEAD REFRIGERATION CO., 3724 Woodward Ave., Detroit, Mich. (1)
"ZEROZONE" (See Iron Mountain Co.)

Classification B

Automatic, Self-contained Refrigeration Systems

Absorption (or adsorption) type, operated by heat (electric, gas, etc.), complete with refrigeration apparatus and refrigerator cabinet (sold and installed as a single unit).

(1) Domestic models for homes and apartments (complete self-contained units).
(2) Commercial models for food stores, etc. (complete self-contained units).

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

AIRAPLEX FRIGIDARIUM CORP., Minneapolis, Minn. (1)
CROSLEY RADIO CORP., Cincinnati, O. (1) (Not automatic)
ELECTROLUX (See Servel Sales, Inc.)
GAS REFRIGERATION CORP., 18 East 41st St., New York, N. Y. (1, 2)
"ICE-O-LATOR" (See National Refrigerating Co.)
NATIONAL REFRIGERATING CO., 125 Munson St., New Haven, Conn. (1)
SERVEL SALES, INC., Evansville, Ind. (1, 2)

Classification C

Refrigerating Units Only, Without Cabinet

Automatic machines or apparatus, compression type, operated by electric motor, for installation in, or remote from, refrigerator cabinets, cases, coolers, etc.

(1) Domestic refrigerating units for refrigerators in homes, individual apartments, etc.
(2) Commercial refrigerating units for food cabinets, cases, coolers in stores, restaurants, hotels, cafeterias, delicatessen.
(3) Refrigerating units for ice cream cabinets.
(4) Refrigerating units for soda fountains.
(5) Refrigerating units for water coolers.
(6) Refrigerating units for milk coolers.
(7) Refrigerating units for bottle coolers.
(8) Refrigerating units for ice cube makers.
(9) Refrigerating units for vending machines.
(10) Refrigerating units for other special designs or applications.

Note: Numbers which follow names of companies refer to the sub-classifications as numbered above.

ABSOPURE (See General Necessities Co.)
"ALPINICE" (See Rauf Mfg. Co.)
AMERICAN ENGINEERING CO., Kensington, Philadelphia, Pa. (2, 3, 4, 5, 6, 7, 8, 9, 10)
AUDRIFFEN REFRIGERATING MACHINE CO.
AUTOLECTRIC ICERATOR CORP., 16 Court St., Brooklyn, N. Y. (1)
AUTOMATIC FREEZER SYNDICATE, 1716 Ford Building., Detroit, Mich. (3)
BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Omaha, Nebr. (2, 3, 4, 5, 6, 7, 8, 9, 10)
BERG MFG. CO., 280 Main St., Gardner, Mass.
CALIFORNIA (See Hart & Burmeister)
CALVERT ELECTRIC REFRIGERATOR CO., Woodberry, Baltimore, Md.
"CAREFREE" (See Automatic Freezer Syndicate)
CHAMPION ELECTRIC CO., Paulina St., at Diversey Pkwy., Chicago, Ill. (1)
"CHAMPION ELECTRO" (See Champion Electric Co.)
"CHILRITE" (See Narragansett Machine Co.)
CLIMAX ELECTRICAL REFRIGERATION CO., 111 W. Monroe St., Chicago, Ill. (2)
COLDAK CORP., 1775 Broadway, New York, N. Y. (1, 2)
COOKE ELECTRIC REFRIGERATION CO., 30 N. Green St., Chicago, Ill. (1, 2)
COPELAND PRODUCTS, INC., 630 Lycaste Ave., Detroit, Mich. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
"CP," (See Creamery Package Mfg. Co.)
CREAMERY PACKAGE MFG. CO., 1243 W. Washington Blvd., Chicago, Ill. (2, 4, 5, 6, 10)
DEER, A. J. CO., Hornell, N. Y.
DEVON MFG. CO., 677 Cambridge St., Worcester, Mass.
DOLE REFRIGERATING MACHINE CO., 1209 Washington Blvd Chicago, Ill. (1, 2)
ESKIMO REFRIGERATION CO., 914 Columbus Ave., Sandusky, O. (1, 2, 3, 7)
EXCELSIOR MOTOR MFG. & SUPPLY CO., 3701 Cortland St., Chicago, Ill. (2, 3, 4, 5, 6, 7, 8, 9, 10)
ELECTRO KOLD CORP., 151 S. Post St., Seattle, Wash.
ELECTRO-VACUUM REFRIGERATOR CO., 202 E. 43rd St., New York, N. Y.
'FEMCOLD" (See Fessler Mfg. Co.)
FESSLER MFG. CO., 19th & Central, Kansas City, Mo. (1)
FREEZEL CORP., Gardner, Mass. (1, 5)
FRICK CO., INC., Waynesboro, Pa. (2, 3, 4, 5, 6, 10)
"FRIGERATOR" (See General Necessities Corp.)
FRIGIDAIRE CORP., Dayton, O. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
FROZONE CORP., 106-108 So. 7th St., Philadelphia, Pa. (1)
GENERAL NECESSITIES CORP., 2011 Park Ave., Detroit, Mich. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
GENERAL REFRIGERATION CO., 109-191 Shirland Ave., Beloit, Wis. (2, 3, 4, 5, 6, 7, 8, 9, 10)
HAVEN MFG. CO., 486 Milwaukee St., Milwaukee, Wis. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
HOME ICE MACHINE CO., 2825 Montrose Ave., Chicago, Ill. (2)
HVID MFG. CO., 38 So. Dearborn St., Chicago, Ill. (1)
ICELECT CORP., 11 Farnum St., Omaha, Nebr. (1)
IRON MOUNTAIN CO., 939-1011 East 95th St., Chicago, Ill. (1, 2, 3, 4, 5, 6, 7, 7, 8, 9, 10)
IROQUOIS ELECTRIC REFRIGERATION CO., 1600 Arch St., Philadelphia, Pa. (1)
JACK FROST REFRIGERATION LIMITED, 347 Sprauren Ave., Toronto, Ont., Canada. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
"JURUICK" (See American Engineering Co.)
KELVINATOR CORP., Plymouth Rd., Detroit, Mich. (1, 2, 3, 4, 5, 6, 7, 7, 8, 9, 10)
KULAIR CORP., 4 So. 15th St., Philadelphia, Pa. (1, 2, 5, 6, 8, 10)
LINDE-DOMESTIC REFRIGERATION, 641 Union St., Montreal, Que., Canada. (2)
LAMSON CO., Syracuse, N. Y. (3, 7, 9)
"LIPMAN" (See General Refrigeration Co.)
"M & E" (See Merchant & Evans Co.)
MECHANA-KOLD CORP., Arcade, N. Y. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
MERCHANT & EVANS CO., 2035 Washington St., Philadelphia, Pa.
NARRAGANSETT MACHINE CO., Vale St., Pawtucket, R. I. (1, 2, 3, 5, 6, 7, 8)
NORGE CORP., 670 E. Woodbridge St., Detroit, Mich. (1)
RICE PRODUCTS, INC., 325 S. Beaubien St., Detroit, Mich. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
SERVEL SALES, INC., Evansville, Ind. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
"SNOW QUEEN," (See Hvid Mfg. Co.)
SUPERIOR ICELESS REFRIGERATOR CORP., Canton, O. (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
"SURE COLD" (See Warner Steel Products Co.)
UNIVERSAL COOLER CORP., 1214 18th St., Detroit, Mich. (1, 2, 3, 4, 5, 6, 7, 8, 9)
WARNER STEEL PRODUCTS CO., Ottawa, Kans.
WAYNE CO., Fort Wayne, Ind. (1, 3, 4, 5, 6, 7, 8, 9, 10)
WELSBACH CO., Ellis St., Gloucester City, N. J. (1, 2, 5, 6, 7, 10)
"ZEROZONE" (See Iron Mountain Co.)

Classification D

Refrigerating Units Only, Without Cabinets

Absorption (or adsorption) type, operated by heat (electric, gas, etc.)

(1) Domestic refrigerating units for refrigerators in homes, individual apartments, etc.
(2) Commercial refrigerating units for food cabinets, cases, coolers in stores, restaurants, hotels, cafeterias, delicatessen.

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

COPELAND PRODUCTS, INC., 630 Lycaste Ave., Detroit, Mich. (1, 2)
SILICA GEL (See Copeland Products)

Classification E

Refrigerating Systems for Multiple Operation

Automatic machines, compression type, operated by electric motor, for connection with several refrigerator cabinets, cases, coolers, etc.

(1) Direct method. Refrigerant circulation.
(2) Indirect method. Brine circulation.

Note: Numbers which fellow company names refer to the sub-classifications as numbered above.

AMERICAN ENGINEERING CO., Kensington Sta., Philadelphia, Pa. (1, 2)
BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Omaha, Nebr. (1, 2)
CHAMPION ELECTRIC CO., Paulina St. at Diversey Blvd., Chicago, Ill. (1)
"CHAMPION ELECTRO" (See Champion Electric Co.)
COLDAK CORP., 1775 Broadway, New York, N. Y. (1)
COPELAND PRODUCTS, INC., 630 Lycaste Ave., Detroit, Mich. (1)
ESKIMO REFRIGERATION CO., 914 Columbia Ave., Sandusky, O. (1)
EXCELSIOR MOTOR MFG. & SUPPLY CO., 3701 Cortland St., Chicago, Ill. (1)
FRICK COMPANY, INC., Waynesboro, Pa. (1, 2)
FRIGIDAIRE CORP., Dayton, O. (1)
GENERAL REFRIGERATOR CO., 101-191 Shirland Ave., Beloit, Wis. (1, 2)
HAVEN MFG. CO., 486 Milwaukee St., Milwaukee, Wis. (1, 2)
IRON MOUNTAIN CO., 939-1011 E. 95th St., Chicago, Ill. (1)
JACK FROST REFRIGERATION, LIMITED, 347 Sorauren Ave., Toronto, Ont., Canada. (1, 2)
'JURUICK," (See American Engineering Co.)
KELVINATOR CORP., Plymouth Rd., Detroit, Mich. (1)
KULAIR CORP., 4 So. 15th St., Philadelphia, Pa. (1)
"LIPMAN," (See General Refrigerator Co.)
NARRANGANSETT MACHINE CO., Vale St., Pawtucket, R. I. (1, 2)
NORGE CORP., 670 E. Woodbridge St., Detroit, Mich. (1)
PEERLESS ICE MACHINE CO., 515 W. 35th St., Chicago, Ill. (1, 2)
RAUF MFG. CO., 30 Central Ave., Bogota, N. J. (1)
TRIUMPH ICE MACHINE CO., 110 E. 70th St., Cincinnati, O. (1, 2)
UNIVERSAL COOLER CORP., 1214 18th St., Detroit, Mich. (1)
"ZEROZONE" (See Iron Mountain Co.)

Classification F

Non-automatic Refrigeration Systems

Heavy machinery and equipment for commercial installations.

(1) Ice plant equipment.
(2) Cold storage plant equipment.
(3) Air cooling equipment.
(4) Other applications.

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

AMERICAN ENGINEERING CO., Kensington Sta., Philadelphia, Pa. (1, 2, 3, 4)
ARMSTRONG MACHINERY CO., Spokane, Wash.
BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Chicago, Ill. (1, 2, 3, 4)
BRUNSWICK-KROESCHILL CO., New Brunswick, N. J.
CASTLE REFRIGERATING MACHINE CO., 1600 W. Washington St., Indianapolis, Ind.
FRICK COMPANY, INC., Waynesboro, Pa. (1, 2, 3, 4)
GEISER MFG. CO., Waynesboro, Pa.
GENERAL REFRIGERATOR CO., 101-191 Shirland Ave., Beloit, Wis. (1, 2, 3, 4)
"JURICK" (See American Engineering Co.)
"LIPMAN" (See General Refrigerator Co.)
STEVENS, WILL P., & SONS, 1630 Long Beach Ave., Los Angeles, Calif. (1, 2)
TRIUMPH ICE MACHINE CO., 110 E. 70th St., Cincinnati, O. (1, 2, 3, 4)
VILTER MFG. CO., Milwaukee, Wis. (1, 2, 3, 4)
WITTENMEIER MACHINE CO., 650 N. Spaulding Ave., Chicago, Ill.
WOLFE ENGINEERING & MFG. CO., 1410 Vernon St., Philadelphia, Pa.
YORK ICE MACHINERY CORP., 2222 Arch St., Philadelphia, Pa.

Classification G

Refrigerating Apparatus

Accessories, materials and supplies (low side).

(1) Evaporators.
(a) Direct type.
(b) Indirect type.
(3) Fittings.
(4) Sheet metal.
(5) Tubing.
(6) Coils.
(7) Tanks.
(8) Freezing trays.
(9) Ice cans.
(10) Valves, expansions or reduction.
(11) Brine pumps, agitators, coolers.
(12) Water softeners.
(13) Absorbers.
(14) Hangers.
(15) Solders.
(16) Corrosion or rust preventatives.

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

ALUMINUM CO. OF AMERICA, Pittsburgh, Pa. (3, 4, 5)
AMERICAN RADIATOR CO., 816 So. Michigan Ave., Chicago, Ill. (1, 7, 8, 10)
AMERICAN SOLDER CO., 2910 16th St., Philadelphia, Pa. (15)
AUTOMATIC REFRIGERATING CO., INC., 618 Capitol Ave., Hartford, Conn. (10)
AUTO TOOL & GAUGE CO., 1440 W. 10th St., Cleveland, O. (3)
BAKELITE CORPORATION, 247 Park Ave., New York City
BAKER ICE MACHINE CO., 3601 N. 16th St., Omaha, Nebr. (1a, 1b, 3, 6, 7, 8, 10, 11, 12, 13)
BUSH MFG. CO., 100 Wellington St., Hartford, Conn. (5)
CENTRAL ALLOY STEEL CORP., Massillon, O. (3, 4)
CHAMPION ELECTRIC CO., Paulina St. & Diversey Blvd., Chicago, Ill. (1a)
COMMONWEALTH BRASS CO., 5781 Commonwealth Ave., Detroit, Mich. (3)
CONKLIN BRASS & COPPER CO., 54 Lafayette St., New York City (3, 4, 5)
CREAMERY PACKAGE MFG. CO., 1243 W. Washington Blvd., Chicago, Ill. (1a, 1b, 3, 4, 6, 7, 9, 10, 11)
DETROIT STAMPING CO., 3445 W. Fort St., Detroit, Mich. (3)
EXCELSIOR MOTOR MFG. & SUPPLY CO., 3701 Cortland St., Chicago, Ill. (3, 10)
FEDDERS MFG. CO., Buffalo, N. Y. (1, 3, 7, 8, 10, 14)
FESSLER MFG. CO., 19th St. & Central Ave., Kansas City, Mo. (6, 8)
FILTRINE MFG. CO., 49 Lexington Ave., Brooklyn, N. Y. (12)
FRENCH MFG. CO., 128 Robbins St., Waterbury, Conn. (3)
FRICK COMPANY, INC., Waynesboro, Pa. (1a, 1b, 3, 6, 7, 10, 11, 14)
FROZONE CORP., 106-108 So. 7th St., Philadelphia, Pa. (1a)
GENERAL REFRIGERATION CO., 101-191 Shirland Ave., Beloit, Wis. (3, 6, 7, 8, 10, 14)
GEUDER, PAESCHKE & FREY CO., St. Paul Ave. & 15th St., Milwaukee, Wis. (3, 7, 8)
HAVEN MFG. CO., 486 Milwaukee St., Milwaukee, Wis. (1a, 1b)
HENRY VALVE CO., 3260-70 W. Grand Ave., Chicago, Ill. (3, 10)
HUHN MFG. CO., 1391 Sedgwick Ave., New York, N. Y. (16)
ICELECT CORP., 11 & Farnum, Omaha, Nebr. (1)
INTERNATIONAL NICKLE CO., 67 Wall St., New York, N. Y. (3, 4, 5, 6, 8, 10)
KULAIR CORP., 4 So. 15th St., Philadelphia, Pa. (1a, 8)
LINDSAY HYDE & CO., 2130 E. York St., Philadelphia, Pa. (3)
MECHANA-KOLD CORP., Arcade, N. Y. (1a)
MOTORS-METAL MFG. CO., 5936 Milford St., Detroit, Mich. (1a, 1b, 4, 7)
MUELLER BRASS CO., 1925 Lapeer Ave., Port Huron, Mich. (3, 5, 6, 10)
PEERLESS ICE MACHINE CO., 515 W. 35th St., Chicago, Ill. (1a, 1b, 8, 10)
PLYMPTON REFRIGERATOR CO., Ellwood City, Pa. (1a, 1b)
RILEY, F. B. (See Standard Refrigerating Appliances)
SERVEL SALES, INC., Evansville, Ind. (1, 3, 5, 6, 7, 8, 10, 11)
STANDARD REFRIGERATING APPLIANCES, 320 Beaubien St., Detroit, Mich. (1a, 1b, 3, 6, 7, 8, 10, 11, 14)
SUPERIOR SHEET STEEL CO., Canton, O. (4)
TRIUMPH ICE MACHINE CO., 110 East 70th St., Cincinnati, O. (1, 3, 6, 7, 10, 11)
WILDER METAL CO., Niles, O. (4)
WOLVERINE TUBE CO., 1415 Central Ave., Detroit, Mich. (5)

Fliers Drop in at Welsbach Plant To Select Colored Models

Major D. Tipton and T. T. Hildebrandt Alighting From Their Fast Army Plane Averaging 145 Miles Per Hour from Baltimore to Gloucester, N. J.

Desiring to see a broader line of color options and models than was displayed by the local Welsbach distributor, Major D. Tipton and T. T. Hildebrandt flew from Baltimore, Md., to the Welsbach Co. headquarters at Gloucester City, N. J., recently where they inspected the new models in colors. Their visit to Welsbach headquarters evidences both the increased interest of progressive citizens in electric refrigeration of the models at the Welsbach nautical transportation to serve modern business.

The visit was made in a Liberty motored Army type plane capable of 165 miles per hour flying speed, and an average of something better than 145 was clocked for the trip. A short inspection of the models at the Welsbach plant made possible the selection of the exact equipments desired, and the return trip to Baltimore was concluded before ordinary train connections would have even permitted the buyers to reach the factory.

Major Wm. D. Tipton, who is building a beautiful home at Stoneleigh, a suburb of Baltimore, is Commanding Officer of the 104th Aerial Observation Squadron, Maryland National Guard, and is general manager of the Chesapeake Aircraft Co., Baltimore. The major is one of the oldest pilots in the country, having over 5,000 flying hours to his credit. As a war ace, Major Tipton served first with the British and subsequently with the American Air Service, being shot down in enemy territory early in 1918 and held prisoner of war until the Armistice.

T. T. Hildebrandt, who likewise wished his Welsbach equipment to harmonize with the other equipments of his home at Mt. Washington, Baltimore, is affiliated with the Manufacturers' Finance Co. of Baltimore, and has long been known as an ardent air-travel devotee. Mr. Hildebrandt says that the time has come when manufacturing organizations throughout the country are profiting by the service that can be rendered only by aeroplanes insofar as rapid and comfortable travel between distant points is concerned.

The Welsbach Co. has foreseen the influence of air travel and devotes the flat roof of one of the buildings at its 13½-acre plant at Gloucester City to an aerial sign board—the name of an adjacent landing field appearing in conjunction with an arrow pointing towards same. Air pilots from time to time express their gratitude for guides of this nature, which are all too infrequent in these early days of commercial flying.

ENGINEERS STUDY REFINEMENTS IN SCIENCE OF REFRIGERATION

(*Concluded from Page 1, Column 1*)

engineer of the Merchants' Cold Storage Company, New York City, and chairman of the Program Committee, reported further upon the outline being made for programs at future meetings.

It was announced that for the coming year the subject of ice plant location, design construction and operation would be made the leading subject. Report was made for the Research Committee, of which H. Harrison, sales manager of the Brunswick Kroeschell Company, New Brunswick, New Jersey, is chairman. This report announced a prize contest for students in technical colleges. A number of further committee reports were received as well as special reports of representatives.

F. L. Fairbanks, of the Quincy Market & Cold Storage Company, Boston, Mass., read a report of the Corrosion Committee, giving a short abstract of findings made at the laboratories of the Massachusetts Institute of Technology on the subject of corrosion. A number of members took part in the discussion lead by Mr. Fairbanks, notable among these being a short talk by A. J. Authenrieth, of the Midwest Utilities Company, Chicago, who has had wide experience in water treatment in connection with its use in ice making plants.

This technical report was followed by a talk by J. F. Nickerson, secretary of the American Institute of Refrigeration, who told of the happenings of the recent International Congress on Refrigeration held in Rome, Italy. He reported that this congress, the fifth of its kind, included twenty-four papers written by American authors. The next congress which is to be held in 1932 will be at Buenos Aires, Argentina. Mr. Nickerson told of the remarkably efficient manner in which all papers and discussions were interpreted and translated into three or four different languages for the benefit of the representatives who came from forty-six different countries.

The afternoon session was concluded with a report from R. H. Heilman, senior fellow at the Mellon Institute, University of Pittsburgh. Mr. Heilman read a paper on the subject of surface transmission, giving the methods being used to separate surface transmission into its two components radiation and convection, radiation taking place from a surface by the same method by which light is given off from an electric light and convection taking place by the same method by which a house is heated with a warm air furnace. Mr. Heilman brought out the fact that radiation from a surface can be decreased by painting with a metal paint such as aluminum paint and that the radiation can be increased by painting with a flat paint. Free convection is independent of the nature of the surface but is dependent on the geometric form. W. H. Carrier, president of the Carrier Engineering Corp., Newark, N. J., and ex-president of the A. S. R. E., opened a discussion and gave an interesting talk on the subject of the previous report.

Pertinent to the active work of the Detroit section of the society which is host at this convention, President Bright invited the society to participate in the meeting of the evening which followed a seven o'clock dinner. Patterson Farmer, of the Universal Cooler Corp., Detroit, was chairman of the meeting following the dinner and introduced V. R. Jacobs, of the Goodyear Tire & Rubber Company, who spoke on the subject of rigid aircraft. Mr. Jacobs, who has been identified with Government sales and aeronautics for the past eight years, has made a careful study of lighter-than-air craft, particularly the Zeppelin type airship. He spoke principally on the immediate future of rigid aircraft development.

C. H. Fessenden, of the University of Michigan, Ann Arbor, Mich., was next introduced and spoke on the subject of thermodynamics.

The Ladies' Committee of the Detroit section held a reception at one o'clock for the ladies from out of town attending the meeting. Mrs. C. C. Spreen, wife of the president of the Detroit section and chief engineer for Kelvinator Corporation, Detroit, was hostess at a tea given at four o'clock at the Detroit Yacht Club. The ladies were further entertained in the evening with a theatre party at which Mrs. Mueller was hostess.

(*See List of Attendance on Page 26*)

Indianapolis G. E. Distributor Holds Summer Sales Meeting

Plans for increasing General Electric sales during the summer months were discussed at a meeting of the salesmen of the Hoosier Electric Refrigerator Corp. at Hotel Lincoln, Indianapolis, Ind., May 7. A. S. Head, manager of the Hoosier Corp. was in charge. George Roesch, L. R. Edwards, W. D. Trawick and L. K. Melvin of the General Electric Co., were present and gave addresses.

Milnor Co., Cincinnati, Named General Electric Distributors

The Milnor Co., 129 Government Sq., Cincinnati, O., has been appointed General Electric refrigerator distributors for territory covering Ohio, Indiana and Kentucky. The main show room of this establishment has recently been remodeled to accommodate the display of electric refrigerators.

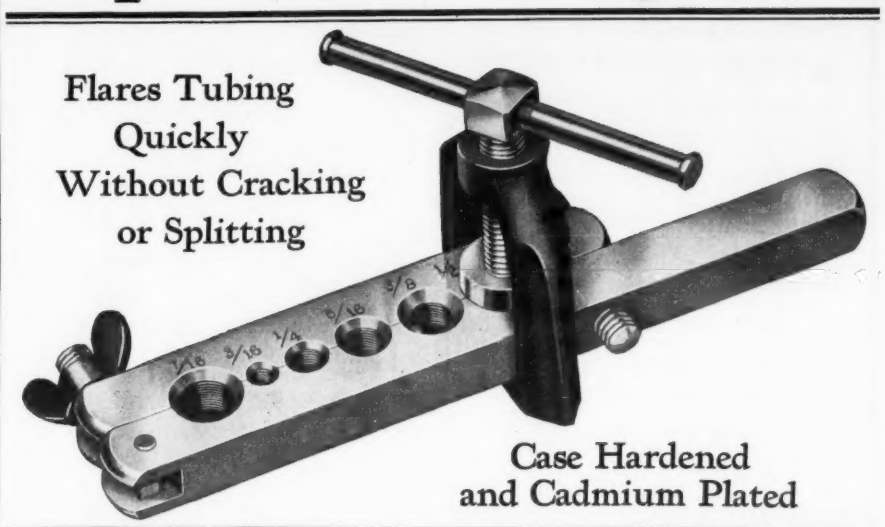
Central Station Comment on Growth of News

"I have been interested from the very beginning in the various news items in your publication and am very glad to note its growth."—G. H. SMITH, sales manager, Virginia Electric & Power Co., Portsmouth, Va.

Reliable TRADE MARK
CORKBOARD
Manufactured by
Luse-Stevenson Co. 307 N. Mich. Ave., Chicago

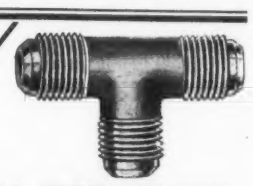
Imperial Flaring Tool

Flares Tubing Quickly Without Cracking or Splitting



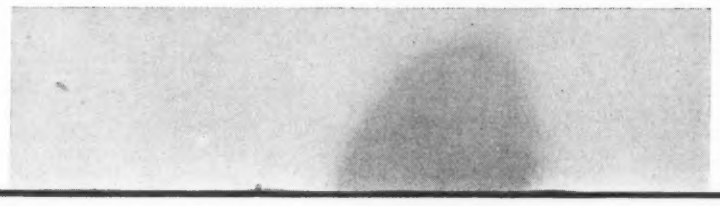
Case Hardened and Cadmium Plated

The new Imperial Flaring Tool gives the proper flare and taper to tubing for making up joints. A perfect flare means a tight joint, and this tool does the work in the least time and with the utmost simplicity. No loose dies—no vise necessary. Tubing can be clamped, flared and removed in less than 30 seconds.
No. 93-F takes tubing sizes ⅛", ¼", ¼", ⅜", ⅜", and ½".
Each.....$3.00
No. 95-F takes tubing sizes ¼", ⅜", ⅜", ½" and ⅝".
Each.....$4.00



Send your order today!
IMPERIAL BRASS MFG. CO.
565 So. Racine Ave. Chicago, Ill.

BRASS FORGINGS
Accurately made to meet all the requirements of Iceless Refrigerator Manufacturers. Will not leak. Let us quote on your requirements.

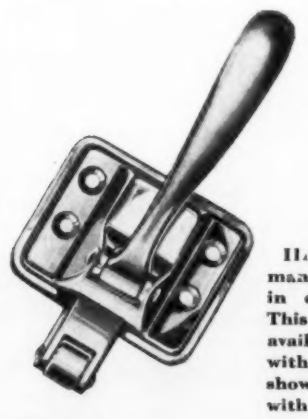


Yes—she does notice the latches

Isn't it the truth? Your engineers burn the midnight mazdas planning new mechanical refinements . . . and when milady poises her pen above the W. K. dotted line, her choice may be guided more by a good-looking, practical trim of hardware! Grand Rapids Brass, in designing its latches and hinges, remembers always that good hardware is a silent but ever-persuasive salesman for your product. Some of our patterns are highly decorative. Others are severely plain. But all are beautifully proportioned and finished, with practical features of construction such as positive action that help keep the customer sold . . . and happy!

GRAND RAPIDS BRASS CO.
GRAND RAPIDS, MICHIGAN

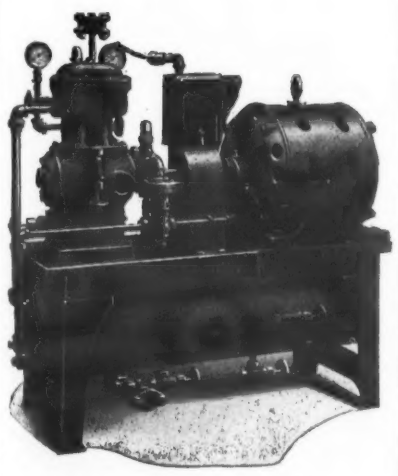
The matter of finish is supremely important. Our deluxe hardware comes in Butler silver, satin silver nickel, and other handsome effects. We're getting splendid results, too, with genuine chromium plate . . . hard, corrosion-proof, ever-brilliant. We can and will work with you to the limit. Manufacturers are invited to write for complete information on any hardware problem that may arise.



Illustrating one of many latches and hinges in our extensive line. This latch, No. 4061, is available in two sizes with stamped housing as shown, or in five sizes with cast housing.

DISTINGUISHED REFRIGERATOR HARDWARE

EVERLASTING FRICK REFRIGERATION



Frick Direct-drive Unit

A size for every commercial need, from ¼ ton up. 40 years' Refrigerating experience built into every Frick machine. World-wide reputation and advertising; installations everywhere.

Distributors wanted.

Frick Company
WAYNESBORO, PA., U.S.A.
ICE MACHINERY SUPERIOR SINCE 1882

CLASSIFIED DIRECTORY (*Continued*)

Refrigeration Systems, Apparatus, Materials, Parts, Accessories, Service and Related Merchandise

Classification H

Refrigerating Machine Parts

Accessories, materials and supplies (high side).

(1) Electric motors.
(2) Transmission.
  (a) Belting.
  (b) Pulleys.
  (c) Gears.
  (d) Gear reduction units.
(3) Fans.
(4) Fan guards or shrouds.
(5) Compressors, complete.
  (a) Castings.
  (b) Stampings.
  (c) Forgings.
  (d) Screws, bolts and nuts.
  (e) Washers, plain and lock.
  (f) Springs.
  (g) Gaskets.
  (h) Valves.
  (i) Pistons.
  (j) Piston rings.
  (k) Crank shafts.
  (l) Connecting rods.
  (m) Seals.
  (n) Ball bearings.
  (o) Bearings and bearing metal.
  (p) Fly wheels.
  (q) Packing.
(6) Condensers.
  (a) Radiator finned type, air cooled.
  (b) Radiator plain type, air cooled.
  (c) Radiator type, semi- air and water cooled.
  (d) Shell and tube type, water cooled.
  (e) Cooling sprays and towers.
(7) Lubricants.
(8) Refrigerants.
  (a) Receivers.
(9) Mountings (for high side).
  (a) Wood.
  (b) Metal.
  (c) Legs.
  (d) Shock absorbers.
(10) Service valves.
(11) Gauges.
(12) Strainers.
(13) Fittings.
(14) Safety devices.
(15) Oil separators.

Numbers which follow company names refer to the sub-classification as numbered above.

ANSUL CHEMICAL CO., Marinette, Wis. (8)
BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Omaha, Neb. (2b, 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h, 5i, 5j, 5k, 5l, 5m, 5o, 5p, 5q, 6b, 6c, 6d, 6e, 9a, 9b, 9c, 9d, 10, 11, 12, 13, 14)
BALDOR ELECTRIC CO., 4351-55 Duncan Ave., St. Louis, Mo. (1)
BUSH MFG. CO., 100 Washington St., Hartford, Conn. (6a, 8a)
CENTURY ELECTRIC CO., 1806 Pine St., St. Louis, Mo. (1)
CHAMPION ELECTRIC CO., Pulina St. at Diversey Blvd., Chicago, Ill. (5)
CLIFFORD MFG. CO., 564 E. 1st St., Boston, Mass. (5m)
COMMONWEALTH BRASS CO., 5781 Commercial Ave., Detroit, Mich. (5a, 5c, 13)
COOKE SEAL RING CO., 30 N. Green St., Chicago, Ill. (5m)
COPE-SWIFT, 247 McDougal Ave., Detroit, Mich. (2a, 2b, 3)
DAY-FAN ELECTRIC CO., 1320 Wisconsin Blvd., Dayton, O. (1)
DETROIT STAMPING CO., 3445 W. Fort St., Detroit, Mich. (5b)
DIEHL MFG. CO., Elizabeth, N. J. (1)
DOLE VALVE CO., 1913 Carroll Ave., Chicago, Ill. (5h)
DOMESTIC ELECTRIC CO., 7209 St. Clair Ave., Cleveland, O. (1)
EMERSON ELEC. MFG. CO., 2012 Washington Ave., St. Louis, Mo. (1)
ESKIMO REFRIGERATION CO., 914 Columbus Ave., Sandusky, O. (6, 9b, 8a)
EXCELSIOR MOTOR MFG. & SUPPLY CO., 3071 Cortland St., Chicago, Ill. (5h, 5i, 5j, 5k, 5l, 5m, 5p, 6, 10, 12)
FLINTLOCK CORP., 4461 W. Jefferson Ave., Detroit, Mich. (6a, 6b)
FRANKLIN AIR COMPRESSOR CO., Norristown, Pa. (5)
FRICK COMPANY, INC., Waynesboro, Pa. (2b, 5a, 5c, 5d, 5g, 5h, 5i, 5k, 5l, 5o, 5p, 6d, 6e, 9b, 9c, 10, 13, 14)
FROZONE CORP., 106-108 S. 7th St., Philadelphia, Pa. (5)
FULTON SYLPHON CO., Knoxville, Tenn. (5m)
GENERAL ELECTRIC CO., Schenectady, N. Y. (1)
GENERAL REFRIGERATION CO., 101 Shirland Ave., Beloit, Wis. (6d, 12, 13, 14)
GEUDER, PAESCHKE & FREY CO., St. Paul Ave., Milwaukee, Wis. (5a, 5b, 5c)
GOODNOW & BLAKE MFG. CO., 3840 Beaver St., Detroit, Mich. (5m)
GURNEY BALL BEARING CO., Jamestown, N. Y. (5n)
HENRY VALVE CO., 3260-70 W. Grand Ave., Chicago, Ill. (5g, 5h, 10, 12, 13, 14)
HOLTZER-CABOT ELECTRIC CO., 125 Amory St., Boston, Mass. (1)
HUHN MFG. CO., 1391 Sedgwick Ave., New York, N. Y. (5q)
INDUSTRIAL CONTROLLER CO., Milwaukee, Wis. (14)
INTERNATIONAL NICKEL CO., 67 Wall St., New York, N. Y. (5a, 5c, 5d, 5e, 5f, 5g, 5h, 9b)
JANETTE MFG. CO., 556 W. Monroe St., Chicago, Ill. (1)
KEROTEST MFG. CO., 2525 Liberty Ave., Pittsburgh, Pa. (5h)
KING CHEMICAL CO., Bound Brook, N. J. (8)
KULAIR CORP., 4 S. 15th St., Philadelphia, Pa. (5m, 5p, 9b)
LEACHWOOD CO., 207 N. Academy Ave., Janesville, Wis. (5m)
LELAND ELECTRIC CO., 218 N. St. Clair St., Dayton, O. (1)
MARATHON ELECTRIC MFG. CO., Wausau, Wis. (1)
MASTER ELECTRIC CO., Linden & Master Ave., Dayton, O. (1)
McCORD RADIATOR MFG. CO., 2587 East Grand Blvd., Detroit, Mich. (6)
MECHANA-KOLD CORP., Arcade, N. Y. (5)
MERCOID CORP., 564 W. Adams St., Chicago, Ill. (11, 14)
MOTORS-METAL MFG. CO., 5936 Milford St., Detroit, Mich. (5b, 9b, 9c)
MUELLER BRASS CO., 1925 Lapeer Ave., Port Huron, Mich. (2c, 5a, 5c, 5d, 5h, 5i, 5l, 13)
NEW DEPARTURE MFG. CO., Bristol, Conn. (5n)
OHIO ELECTRIC & CONTROL CO., 5900 Maurice Ave., Cleveland, O. (1)
PEERLESS ELECTRIC CO., Warren O. (1)
PEERLESS ICE MACHINE CO., 515 W. 35th St., Chicago, Ill. (14)
PETERSON SPRING CO., 1660 Beard St., Detroit, Mich. (5f)
RILEY, F. B. (See Standard Refrigerating Appliances)
ROBBINS & MEYERS, Springfield, O. (1)
ROBERTS BRASS CO., 5435 W. Fort St., Detroit, Mich. (5a, 5b, 5c)
ROESSLER & HASSLACHER CO., 709 Sixth Ave., New York, N. Y. (8)
ROME-TURNEY CO., Rome, N. Y. (6)
SCHLIEMANN COMPANIES, 53 Park Pl., New York, N. Y. (7)
SCOVILL MFG. CO., 99 Mill St., Waterbury, Conn. (5a, 5b, 5c, 5d, 5e)
S. K. F. INDUSTRIES, INC., 165 Broadway, New York, N. Y. (5n)
STANDARD REFRIGERATING APPLIANCES, 320 Beaubien St., Detroit, Mich. (2a, 2b, 3, 5m, 6a, 6d, 7, 9d, 12)
STANDARD THERMOMETER CO., 65 Shirley St., Boston, Mass. (14)
TRIUMPH ICE MACHINE CO., 110 E. 70th St., Cincinnati, O. (1, 5h, 6d, 6e, 10, 11, 12, 13, 14)
U. S. GAUGE CO., 44 Beaver St., New York, N. Y. (11)
VIRGINIA SMELTING CO., West Norfolk, Va. (8)
WAGNER ELECTRIC CO., 6400 Plymouth St., St. Louis, Mo. (1)
WESTERN AUTOMATIC MACHINE SCREW CO., Elyria, O. (2b, 2c, 5d, 5h, 5i)
WESTINGHOUSE ELECTRIC & MFG. CO., East Springfield, Mass. (1)
WOLVERINE TUBE CO., 1415 Central Ave., Detroit, Mich. (6)
YOUNG RADIATOR CO., 709 Mead St., Racine, Wis. (6a, 6b, 6c, 6d)

Classification I

Controls, Regulators, Etc.

(1) Pressure controls.
(2) Temperature controls, thermostats.
(3) Switches.
(4) Relays.
(5) Electrical supplies.

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

ABSOLUTE CONTACTOR CORP., Elkhart, Ind. (1, 2)
AMERICAN RADIATOR CO., 816 S. Michigan Ave., Chicago, Ill. (1, 2)
AUTOMATIC ELECTRIC HEATER CO., 1505 Race St., Philadelphia. (2)
AUTOMATIC RECLOSING CIRCUIT BREAKER CO., Columbus, O. (2)
AUTOMATIC REFRIGERATING CO., INC., 618 Capitol Ave., Hartford, Conn. (1, 2, 3)
BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Omaha, Neb. (1, 2, 3, 4, 5)
BEEBE, F. E., 18608 Lake Shore Blvd., Cleveland, O. (1, 2, 3)
BENJAMIN ELECTRIC CO., 120 S. Sangamon St., Chicago. (5)
BISHOP & BABCOCK SALES CO., 4901-15 Hamilton Ave. N. E., Cleveland, O. (2, 3)
EXCELSIOR MOTOR MFG. & SUPPLY CO., 3701 Cortland St., Chicago, Ill. (1)
FEDERAL GAUGE CO., 564 W. Adams St., Chicago, Ill. (1, 2, 3)
FROZONE CORP., 106-108 S. 7th St., Philadelphia, Pa. (1)
FULTON SYLPHON CO., Nashville, Tenn. (1, 2, 3)
GENERAL ELECTRIC CO., Schenectady, N. Y. (2, 3, 4, 5)
GOODNOW & BLAKE MFG. CO., 3840 Beaver St., Detroit, Mich. (1, 2)
HENRY VALVE CO., 3260-70 W. Grand Ave., Chicago, Ill. (1)
HUHN MFG. CO., 1391 Sedgwick Ave., New York City. (2, 4)
"I-C," (See Industrial Controller Co.)
INDUSTRIAL CONTROLLER CO., 306 Hanover St., Milwaukee, Wis. (3, 4)
KEOKUK REFRIGERATING CO., Keokuk, Ia. (2)
LEACHWOOD CO., 207 N. Academy St., Janesville, Wis. (1, 2)
MECHANA-KOLD CORP., Arcade, N. Y. (2)
MERCOID CORP., 564 W. Adams St., Chicago, Ill. (1, 2)
MOTO METER CO., Wilbur Ave., Long Island City, N. Y. (2)
PEERLESS ICE MACHINE CO., 315 35th St., Chicago, Ill. (1)
PENN ELECTRIC MACHINE CO., Box 1456 Des Moines, Ia. (1, 2, 3)
SCOVILL MFG. CO., Waterbury, Conn. (5)
STANDARD REFRIGERATING APPLIANCES, 320 Beaubien St., Detroit, Mich. (1, 2)
STANDARD THERMOMETER CO., 65 Shirley St., Boston, Mass. (2, 3)
TAGLIABUE, C. J., MFG. CO., 18 33rd St., Brooklyn, N. Y.
TAYLOR INSTRUMENT CO., Rochester, N. Y. (2)
WADSWORTH ELECTRIC MFG. CO., INC., Covington, Ky. (3)
WESTINGHOUSE ELECTRIC & MFG. CO., East Springfield, Mass. (3)

Classification J

Refrigerator Cabinets

Cases, coolers, etc. Designed for use in connection with refrigerating machines or apparatus.

(1) Domestic refrigerators for homes and apartments.
(2) Commercial refrigerators for butchers, grocers, hotels, restaurants, delicatessens, etc.
(3) Display cases.
(4) Ice cream cabinets.
(5) Soda fountains.
(6) Water coolers.
(7) Milk coolers.
  (a) Salad coolers.
  (b) Fruit coolers.
(8) Bottle coolers.
(9) Ice cube makers.
(10) Ice makers.
(11) Vending machines.
(12) Truck bodies, cars, etc.
(13) Cold storage and cooling rooms.
(14) Other special applications.

Note: Numbers which follow company names refer to the sub-classifications as numbered above.

ACORN OPALITE-METAL SPECIALTIES CO., 1052-54 W. Monroe St., Chicago, Ill. (2, 3, 4, 5, 6, 7, 7-a, 7-b, 8)
ALASKA REFRIGERATOR CO., Muskegon, Mich. (1)
ALBATROSS STEEL EQUIPMENT CO., 1007 So. Grand Ave., Los Angeles, Calif. (1)
ALLEN FILTER CO., 25-43 So. St. Clair St., Toledo, Ohio. (6, 8)
ANDERSON SHOW CASE MFG. CO., 321 N. E. Filmore St., Minneapolis, Minn. (3, 2)
ARLINGTON REFRIGERATOR CO., INC., Arlington, Vt. (1)
ATMOSPHERIC ENGINEERING CO., Box 1597, Houston, Tex. (6)
AUTOMATIC FREEZER SYNDICATE, 1716 Ford Bldg., Detroit, Mich. (4)
BAKER ICE MACHINE CO., INC, 3601 N. 16th St., Omaha, Neb. (2, 3, 4, 6, 7, 9, 10, 13, 14)
BALDWIN REFRIGERATOR CO., Burlington, Vt. (1)
BANTA REFRIGERATOR CO., Clearfield, Pa. (2)
BASTIAN BLESSING CO., 240 E. Ontario St., Chicago, Ill. (5)
BELDING-HALL ELECTRICE CORP. RECEIVER, Belding, Mich. (1. 2. 3. 13)
BENJAMIN ELECTRIC MFG. CO., 120 S. Sangamon St., Chicago, Ill. (1, 4)
BISHOP & BABCOCK SALES CO., 4901-4915 Hamilton Ave., N. E., Cleveland, O. (5)
BOHN REFRIGERATOR CO., 1350 University Ave., St. Paul, Minn. (1)
BROOKS CABINET CO., INC., 1028 W. 27th St., Norfolk, Va. (1)
CAMEO REFRIGERATOR CO., 973 N. Main St., Los Angeles, Calif. (1, 6)
CAMPBELL-SHIRK CO., 3200-10 Auer Ave., Milwaukee, Wis. (1, 2, 3, 4, 7)
CHALLENGE REFRIGERATOR CO., Grand Haven, Mich. (1)
CINCINNATI BUTCHERS' SUPPLY CO., 1972-2008 Central Ave., Cincinnati, O. (1, 2, 3, 4, 13)
CLEVELAND ICELESS COOLER CO., 971 E. 63rd St., Cleveland, O. (6)
CONSOLIDATED CABINET CORP., 320 Douglas St., N. W., Grand Rapids, Mich. (4, 5)
CROCKER, JOS., REFRIGERATOR CO., Sheboygan, Wis. (2)
CRYSTAL REFRIGERATOR CO., Fremont, Neb. (1)
"CRYSTEEL" (See Benjamin Electric Mfg. Co.) (1)
DETROIT BUTCHER SUPPLY CO., 1455-57 Gratiot Ave., Detroit, Mich. (2, 3, 13)
DILLINGHAM MFG. CO., Sheboygan, Wis. (2)
DOWNING MFG. CO., Downing, Wis. (2, 3, 8)
"DRY COLD" (See C. V. Hill & Co., Trenton, N. J.) (2, 3, 4, 8, 13)
DRY-KOLD REFRIGERATOR CO., Niles, Mich. (2)
EBINGER, THE D. A., SANITARY MFG. CO., 180 Lucas St., Columbus, O. (6)
EDDY, D., & SONS CO., 336 Adams St., Boston, Mass. (2)
EHRLICH, E., & SONS MFG. CO., St. Joseph, Missouri (2)
"ELECTRICE" (See Belding-Hall Electrice Corp.)
ELSINGHORST BROS., 138 Broadway Ave., Buffalo, N. Y. (2, 3, 4, 5, 6, 7, 9)
ERIE ART METAL CO., Erie, Pa. (1, 4)
ERIE METAL FURNITURE CO., Erie, Pa. (1, 4)
ESCO CABINET CO., 140 E. Market St., Westchester, Pa. (7, 8)
EUREKA REFRIGERATOR CO., LTD., Owen Sound, Ontario, Canada (2)
EVERSON FILTER CO., 647 No. Green St., Chicago, Ill. (6)
FAIRFIELD MFG. CO., 82-106 St. John St., Portland, Me. (2)
FAY-RODGERS REFRIGERATOR WORKS, Box 2573, Memphis, Tenn. (2)
FERN-GLOVER REFRIGERATOR CORP., Linwood Rd. & Penna. R. R., Cincinnati, O. (1)
FILTRINE MFG. CO., 49 Lexington Ave., Brooklyn, N. Y. (6, 14)
FRESNO SHOWCASE & FIXTURE CO., 1805 Anna St., Fresno, Calif. (2, 3, 13)
FRIEDRICH, ED., 1117 E. Commerce St. Los Angeles, Calif. (2)
GARLAND REFRIGERATOR CO., INC., 101 Park Ave., New York, N. Y. (2)
GIBSON REFRIGERATOR CO., Greenville, Mich. (1, 2)
GLOEKLER, BERNARD, CO., 1627 Penn Ave., Pittsburgh, Pa. (2, 3, 4, 6)
GROTHE, J. J., CO., 5-7 Connecticut Av., Woburn, Mass. (12)
GRUENDLER, GUSTAV J., MFG. CO., INC., 814-16 No. Broadway, St. Louis, Mo. (2, 3)
GURNEY REFRIGERATOR CO., Fond du Lac, Wis. (1)
HALE & KILBURN CO., 1800 Lehigh Ave., Philadelphia, Pa. (4)
HALL REFRIGERATOR CORP., Greenville Mich. (1)
HANFORD PRODUCTS CO., Sioux City, Iowa. (4)
HARDER REFRIGERATOR CORP., Cobleskill, N. Y. (1)
HART & BURMEISTER, Jerrold St., San Francisco, Calif. (1)
HASKELITE MFG. CORP., 120 So. La Salle St., Chicago, Ill. (1, 3, 4, 5, 6, 10, 12)
HEINTZ MFG. CO., Front & Olney Ave., Philadelphia, Pa. (1, 6)
HEINZ & MUNSCHAUR, Superior & Randall Sts., Buffalo, N. Y. (2)
HERRICK REFRIGERATOR & COLD STORAGE CO., 1019 Commercial St., Waterloo, Ia. (1, 2, 3, 8, 14)
HIBBARD CO., Euclid Ave. & 65th St., Cleveland, O. (8)
HILL, C. V. & CO., 360 Pennington Ave., Trenton, N. J. (2, 3, 4, 8, 13)
HOLCOMB & HOKE MFG. CO., 1545 Van Buren Ave., Indianapolis, Ind. (2)
HOME PRODUCTS CO., Jackson, Mich. (1)
HOWE SCALE CO., Rutland, Vt. (2, 3)
HUHN CO., 1391 Sedgwick Ave., New York, N. Y. (2)
HUSSMANN, HARRY L., REFRIGERATOR CO., St. Louis, Mo. (2, 3, 5)
ICELESS COOLER CORP., 225 N. Michigan Avenue Blvd., Chicago, Ill. (1, 4, 5)
ILLINOIS REFRIGERATOR CO., Morrison, Ill. (1)
JEWETT REFRIGERATOR CO., 2 Letchworth St., Buffalo, N. Y. (1, 2, 6, 9, 10, 13)
J. T. MFG. CO., Nashville, Tenn. (1)
KNIGHT, STANLEY H., CO., 218 West Superior St., Chicago, Ill. (5)
KNOX PRODUCTS CO., Wilmington, Dela. 1, 4)
KOCH BUTCHERS' SUPPLY CO., North Kansas, Mo. (2)
LA CROSSE REFRIGERATOR CO., La Crosse, Wis. (2)
LAMSON CO., Syracuse, N. Y. (4)
LEONARD REFRIGERATOR CO., Grand Rapids, Mich. (1, 2)
LIGONIER REFRIGERATOR CO., Ligonier, Ind. (2, 3, 13)
LIQUID CARBONIC CORP., 3100 S. Kedzie Ave., Chicago, Ill. (3, 5, 8)
LIVER, C. B. & CO., 1502-12 Capital Ave., Omaha, Neb. (2, 3, 6, 7, 8, 13)
LORILLARD REFRIGERATOR CO., 85 Grand St., New York, N. Y. (2, 3, 4, 10, 13, 14)
LOUISVILLE REFRIGERATOR CORP., 4460 Louisville Ave., Louisville, Ky. (1)
LOUISVILLE TIN & STOVE CO., Louisville, Ky. (1)
LUND, I. A., CORP., 1018-24 S. Wabash Ave., Chicago, Ill. (2)
MACE, L. H. & CO., INC., 55 E. 150th St., New York City. (1)
MAINE MFG. CO., Nashua, N. H. (1)
MARINETTE SHOW CASE CO., Marinette, Wis. (2, 3, 13)
McCRAY REFRIGERATOR SALES CORP., Kendallville, Ind. (1, 2, 3)
MECHANA-KOLD CORP., Arcade, N. Y. (4, 6, 7, 10)
MILBURN REFRIGERATOR CO., Reed St., Kalamazoo, Mich. (2, 3)
MOTORS-METAL MFG. CO., 5936 Milford Ave., Detroit, Mich. (1, 2, 4, 6, 7, 8)
NATIONAL REFRIGERATING CO., 125 Munson St., New Haven, Conn. (1)
NELSON, C., MFG. CO., 2310-16 Division St., St. Louis, Mo. (4, 8)
NORTHEY MFG. CO., Waterloo, Iowa. (1, 2, 3, 4, 6, 7, 8, 13, 14)
NORTH STAR REFRIGERATOR CO., Chattanooga, Tenn. (1)
OMAHA FIXTURE & SUPPLY CO., 11th & Douglas Sts., Omaha, Nebr. (2)
PICK, ALBERT & CO., 208-224 West Randolph St., Chicago, Ill. (2, 3, 4, 5, 13, 14)
PLYMPTON REFRIGERATOR CO., INC., Ellwood City, Pa. (2)
POLHEMUS, P. B., CO., 110 West 34th St., New York, N. Y. (3, 4, 6, 7)
PORTSMOUTH STOVE & RANGE CO., Portsmouth, O. (1)
PROGRESS REFRIGERATOR CO., 621 W. Main St., Louisville, Ky. (1)
PURO FILTER CORPORATION OF AMERICA, 436-440 Lafayette St., New York, N. Y. (6)
PURO SANITARY DRINKING FOUNTAIN CO., Haydenville, Mass. (6)
RANNEY REFRIGERATOR CO., Greenville, Mich. (1)
"REVOLVO-ENDURO" (See Iceless Cooler Corp.)
REX MFG. CO., Connersville, Ind. (1, 3, 11)
RHINELANDER REFRIGERATOR CO., Rhinelander, Wis. (1)
RUDDY MFG. CO., LTD., Brantford, Ont., Canada (1, 2, 3, 4, 7, 14)
RUNDLE-SPENCE MFG. CO., Milwaukee, Wis. (6)
RUSS MFG. CO., 5700 Walworth Ave., Cleveland, O. (2, 3, 5)
RUTLAND MFG. CO., Rutland, Vt. (2)
SACO-LOWELL SHOPS, Lowell, Mass. (1)
SAVAGE ARMS CORP, 100 East 42nd St., New York City (4)
SAVORY, INC., 90 Alabama St., Buffalo, N. Y. (1)
SCHAEFER, GUSTAV, WAGON CO., Cleveland, O. (2)
SCHMIDT, C., CO., John & Livingston Sts., Cincinnati, O. (2, 3, 10, 13, 14)
SCHWENGER-KLEIN CO., 5201 Denison Ave., Cleveland, O. (2, 3, 13)
SEEGER REFRIGERATOR CO., St. Paul, Minn. (1, 2, 3, 13, 14)
SHERER-GILLETT CO., Washington & Jefferson Sts., Chicago, Ill. (2, 3, 4, 14)
ST. LOUIS BUTCHERS' SUPPLY CO., 1545-47 West 15th St., St. Louis Mo. (2, 3, 13)
SUCCESS MFG. CO., Gloucester, Mass. (1)
TENNESSEE FURNITURE CORP., Chattanooga, Tenn. (1)
VALERIUS CORP., Jefferson, Wis. (4, 5, 7)
VOGT REFRIGERATOR CO., Louisville, Ky. (1)
WASMUTH-ENDICOTT CO., 1311 Snowden St., Andrews, Ind. (1)
ZERO-VENDER, INC., 42 E. Pearson St., Chicago, Ill. (11)

Classification K

Refrigerator Cabinet Materials, Parts and Accessories

(1) Lumber.
(2) Sheet metal.
(3) Plywood and Plymetal.
(4) Structural steel.
(5) Insulation.
(6) Waterproofing materials.
(7) Cements, glue, etc.
(8) Porcelain enameled parts.
(9) Porcelain enameling materials.
(10) Finishing materials (paints, varnish, lacquers, fillers, enamels).
(11) Hardware.
(12) Trimmings.
(13) Shelves.
(14) Gaskets.
(15) Name plates.
(16) Screws, nails, bolts, etc.
(17) Water coils and fittings.
(18) Shipping containers, crates, etc.
(19) Tags, labels.

Note: Numbers which follow the company names refer to the sub-classifications as numbered above.

ACME WHITE LEAD & COLOR WORKS, 8250 St. Aubin Ave., Detroit, Mich. (10)
AMERICAN ROLLING MILL CO., THE, Middletown, O. (2)
ARCADE MFG. CO., 1212 E. Shawnee St., Freeport, Ill. (11, 12)
"ARMCO" (See American Rolling Mills Co.)
ARMSTRONG CORK & INSULATION CO., 24th St. at Allegheny River, Pittsburgh, Pa. (5)
ATLAS PLYWOOD CORP., 934 Park Sq. Bldg., Boston, Mass. (18)
BAKER ICE MACHINE CO., 3601 No. 16th St., Omaha, Nebr. (5, 6, 11, 12, 13, 14, 17, 18)
BAKELITE CORP., 247 Park Ave., New York, N. Y. (12)
"BALSAM WOOL" (See Wood Conversion Co.)
BENJAMIN ELECTRIC CO., 120 S. Sangamon St., Chicago, Ill. (8, 9)
BERRY BROS., 211 Lieb St., Detroit, Mich. (10)
BOSLEY, D. W. CO., 1901 Carroll Ave., Chicago, Ill. (14)
BRADLEY-HURTZ CO., 2626 So. Dearborn St., Chicago, Ill. (10)
CELOTEX CO., 645 No. Michigan Ave., Chicago, Ill. (5)
CHICAGO MILL & LUMBER CO., 111 West Washington St., Chicago, Ill. (1, 3, 18)
CORDLEY HAYES, 7 Leonard St., New York, N. Y. (11)
CORK IMPORT CO., 345 W. 40th St., New York, N. Y. (5)
DENT HARDWARE CO., Fullerton, Pa. (11, 12)
DRY-ZERO CORP., 130 No. Wells St., Chicago, Ill. (5)
Du PONT DE NEMOURS, E. I., & CO., (CHEMICAL PRODUCTS DIV.), Parlin, N. J. (10)
FERRO-ENAMEL SUPPLY CO., 2100 Keith Bldg., Cleveland, O. (8, 9)
FILTRINE MFG. CO., 49 Lexington Ave., Brooklyn, N. Y. (17)
FRICK COMPANY, INC., Waynesboro, Pa. (17)
GRAND RAPIDS BRASS CO., 90 Scribner Ave., Grand Rapids, Mich. (11, 12, 15)
HASKELITE MANUFACTURING CORP., 120 So. La Salle St., Chicago, Ill. (3)
HOWE SCALE CO., Rutland, Vt. (11)
INSULATION CORK CO., 200 Broadway, New York, N. Y. (5)
INTERNATIONAL NICKEL CO., 67 Wall St., New York, N. Y. (2, 11, 12, 13, 15, 16)
IROQUOIS ELECTRIC REFRIGERATION CO., 1600 Arch St., Philadelphia, Pa. (5, 6)
IRVING VARNISH & INSULATOR CO., Irvington, N. J. (10)
JARROW PRODUCTS CO., 134 So. 17th St., St. Louis, Mo. (14)
LUCAS, JOHN, CO., 322 Race St., Philadelphia, Pa. (10)
LUSE-STEVENSON CO., 307 No. Michigan Ave., Chicago, Ill. (5)
MAAS & WALDSTEIN CO., 438 Riverside Ave., Newark, N. J. (10)
METAL WOOD CO., 151 Fifth Ave., New York, N. Y. (18)
MET-L-WOOD CORP., 6755 W 65th St., Chicago, Ill. (3)
"MONEL" (See International Nickel Co.)
MOTORS-METAL MFG. CO., 5936 Milford Ave., Detroit, Mich. (2, 4)
MUELLER BRASS CO., 1925 Lapeer Ave., Port Huron, Mich. (11, 12)
NATIONAL COPPER & SMELTING CO., 12120 Euclid Ave., Cleveland, O. (2)
"PLYMETL" (See Haskelite Mfg. Corp.)
PORCELAIN ENAMEL & MFG. CO., Eastern Ave., at 23rd St., Baltimore, Md. (8, 9)
PURE CORK PRODUCTS CO., INC., 600 Shubert Bldg., Philadelphia, Pa. (5)
ROESSLER & HASSLACHER CHEMICAL CO., 709 Sixth Ave., New York, N. Y. (9, 10)
SCHMIDGALL, FRED & SON, 3089-91 Colerain Ave., Cincinnati, O. (11)
SUPERIOR SHEET STEEL CO., Canton, O. (2)
THERMWOOL PRODUCTS CO., INC., 517 Broadway, New York, N. Y. (5)
TUTTLE'S TITE-ON CEMENT CO., 4505 Ravenswood Ave., Chicago, Ill. (6, 7)
UNITED CORK COMPANIES, Grant Avenue, Lyndhurst, N. J. (5)
U. S. MINERAL WOOL CO., 280 Madison Ave., New York City. (5)
WEYERHAUSER FOREST PRODUCTS (See Wood Conversion Co.)
WICANDER & CO., INC., 271 Madison Ave., New York City. (5)
WINTERS & CRAMPTON MFG. CO., Commerce Ave. & Goodrich St., Grand Rapids, Mich. (11)
WIRFS, E. J., ORGANIZATION, INC., 106 S. 17th St., St. Louis, Mo. (14)
WOOD CONVERSION CO., 360 N. Michigan Ave., Chicago, Ill. (5)

NOTICE.—The Classified Directory will be republished with additions and corrections in a later issue of the News. Manufacturers are requested to send desired changes without delay.

Classification L

Professional, Educational and Sales Service

(1) Consulting engineers.
(2) Patent attorneys.
(3) Association and societies.
(4) Schools, training courses.
(5) Books.
(6) Trade publications, magazines, periodicals.
(7) Advertising and sales service.
(8) Testing laboratories.

Note: Numbers which follows the company names refer to the sub-classifications as numbered above.

BRADLEY-HURTZ CO., 2626 So. Dearborn St., Chicago, Ill. (1)
CORK IMPORT CO., 345 W. 40th St., New York, N. Y. (1)
ELECTRIC REFRIGERATION NEWS, 554 Maccabees Bldg., Detroit, Mich. (5, 6)
ELECTRICAL TESTING LABORATORIES, 80th St. & East End Ave., New York City. N. Y. (1, 8)
ELECTROGRAPH CORP., W. Grand Blvd., Detroit, Mich. (7)
EVANS, WINTER, HEBB, 818 W. Hancock Ave., Detroit, Mich. (7)
ICELECT CORP., 11 & Farnam St., Omaha, Nebr. (1)
ROLLINS, LEONARD E., 1507 Stroh Bldg., Detroit, Mich. (2)
SCHOOL OF ENGINEERING, 163 E. Wells St., Milwaukee, Wis. (4)
UTILITIES ENGINEERING INSTITUTE, 3120 N. Clark St., Chicago, Ill. (4)
UTILITIES ENGINEERING SERVICE, 3120 N. Clark St., Chicago, Ill. (4)
VAN DEVENTER, H. R., INC., 342 Madison Ave., New York, N. Y. (1)
VAN DEVENTER, H. R., 342 Madison Ave., New York, N. Y. (2)
WALRAVEN BROS., INC., 1509 Coruth St., Dallas, Tex. (7)

Classification M

Production, Installation and Service Equipment and Supplies

(1) Tools.
  (a) Machine tools.
  (b) Portable electric tools.
  (c) Hand tools.
(2) Material handling equipment.
  (a) Conveyors.
  (b) Trucks, hand and power.
  (c) Hoists, jacks, etc.
(3) Enameling furnaces, ovens, etc.
(4) Paint spraying equipment.
(5) Testing instruments.
(6) Ventilators, blowers, etc.
(7) Masks.
(8) Uniforms.
(9) Tubing.
(10) Fittings.
(11) Pipe covering.
(12) Signs.
(13) Absorbers (for refrigerant).
(14) Hose.
(15) Hair felt products.
(16) Calcium Chloride.
(17) Air filters, washers.
(18) Purifiers.
(19) Dehumidifiers.
(20) Dehydrators.

Note: Numbers which follow the company names refer to the sub-classifications as numbered above.

BAKER ICE MACHINE CO., INC., 3601 N. 16th St., Omaha, Neb. (1a, 5, 6, 10, 11, 17, 18, 19; 20)
BENJAMIN ELECTRIC MFG. CO., 120 S. Sangamon St., Chicago, Ill. (3)
FRANKLIN AIR COMPRESSOR CO., 4 S. 15th St., Philadelphia, Pa. (1a, 4)
FRICK COMPANY, INC., Waynesboro, Pa. (10, 19, 20)
GENERAL ELECTRIC CO., Schnectady, N. Y. (5)
HENRY VALVE CO., 3260-70 W. Grand Ave., Chicago, Ill. (10)
KEROTEST MFG. CO., 2525 Liberty Ave., Pittsburgh, Pa. (10)
LEWIS-SHEPARD CO., 125 Walnut St., Boston, Mass. (2b, 2c)
MUELLER BRASS CO., 1925 Lapeer Ave., Port Huron, Mich. (9, 10)
NATIONAL COPPER & SMELTING CO., 12120 Euclid Ave., Cleveland, O. (9)
TRIUMPH ICE MACHINE CO., 110 E 70th St., Cincinnati, O. (10, 18)

Classification N

Related Merchandise.

(1) Food containers.
(2) Thermometers.
(3) Demonstration materials and supplies.
(4) Artifiicial foods.
(5) Advertising novelties.
(6) Air and gas heaters.
(7) Vacuum cleaners.
(8) Washing and ironing machines.
(9) Lighting.
(10) Radio.

Note: Numbers which follow the company names refer to the sub-classifications as numbered above.

BENJAMIN ELECTRIC MFG. CO., 120 S. Sangamon St., Chicago, Ill. (1, 9)
CHANEY MFG. CO., E. Pleasant St., Springfield, O. (2, 5)
DRYICE CORPORATION OF AMERICA, 50 E. 42nd St., New York, N. Y.
GENERAL ELECTRIC CO., Schenectady, N. Y. (7, 8, 9, 10)
HASKELITE MFG. CORP., 120 So. LaSalle St., Chicago, Ill. (10)
HILLSON, H. M. CO., Somerville (Boston) Mass. (1)
LIQUID CARBONIC CORPORATION, 3100 S. Kedzie Ave., Chicago, Ill. (1)
MOTO METER CO., INC., Long Island City, N. Y. (2)
SPARKLETS, INC., 19 West 44th St., New York, N. Y. (3)
TRUTULIFE WAX PRODUCTS CO., 27 Erie St., Milwaukee, Wis. (3, 4, 5)

FEDDERS REPRESENTED AT ATLANTIC CITY

W. D. Keefe, sales manager, electric refrigeration division, Fedders Mfg. Co., Buffalo, N. Y. calls attention to the omission of the Fedders representatives from the list published in the May 23 issue of the NEWS. The headquarters of the Fedders organization will be at the Ritz-Carlton Hotel, Atlantic City, during the N. E. L. A. Convention.

WAGNER ELECTRIC MEN AT CONVENTION

A disassembled motor of the fractional horse-power size designed for use in domestic and commercial refrigerating units is exhibited at the Wagner booth, space 376. The company is represented by P. B. Postlethwaite, E. H. Cheney, E. W. Goldschmidt, Brooks Faxon, Elmer Lingard, R. L. Wells, A. H. Ellerman, H. L. Nagel, H. B. Keith, A. E. Herzberg, all at the Shelburne Hotel.

Expect to Sell 15,000 Units This Year

A survey of the various retail dealers selling electric refrigerators in electric territory in Northern California indicates expected sales in 2,500,000 of population with 455,000 wired homes that will approximate closely a total of 14,000 to 15,000 units this year, divided among the well-known makes. Advertising campaigns to help sell these machines are estimated to run about $12,000, being by central-station companies, an increase of 50 percent over 1927, with the dealers advertising independently and in co-operation with the various manufacturers of refrigerators. The central-station policy is one of co-operation with the retailing outlets, rather than direct selling by power companies, as very frequently is the case in all California territory, in contrast with the East. Where possible, power companies are adopting the N. E. L. A. campaign as an auxiliary to general sales effort by the independent retailers.

Central Maine Power Opens New Retail Store

A new retail electric store was opened by Central Maine Power Co. on May 18, at Bridgton, Me., near the N. H. border, with 500 invited guests in attendance. The store carried a display of electrical merchandise and was decorated under the supervision of Henry Thorpe, division commercial manager, and Miss Laura La Paige of Lewiston, Me.

The stores of Central Maine Power Co., of Augusta, Me., are engaged in a "June bride trim" window contest, with all stores in the system competing for prizes of $25, $18 and $15, and to cover the period June 11 to 16, with judging by G. S. Williams, W. B. Getchell and A. T. Littlefield. The basis of judging is to be merchandise value, originality, use of space facilities and attention value.

Test Shows Average Electric Refrigerator Consumes 46 kw-h. Per Month

In a test made on 47 farm electrical refrigerators operating on Renner circuits in South Dakota, the average monthly consumption on an annual basis was 46 kw-h. per month. During July, August and September consumption averaged 80 kw-h., and during the balance of the year 33.2 kw-h.

Gulf Power Company Starts G.-E. Campaign in Pensacola

A campaign to sell General Electric refrigerators, beginning June 1, is under way in the territory of the Gulf Power Co., Pensacola, Fla. Terms, prizes and commissions have not yet been disclosed, but preparations have been under way for several weeks, with all employees of the company participating.

Lorain (O.) Domestic KW-H Average Climbs in April

Lorain division of Ohio Public Service Co., for April 1928, reports average domestic current consumption of 40.2 KWH., against 38.7 KWH in 1927. This is of a basis of 480.4 KWH per annum, if the rate is maintained.

A Sale a Day Keeps the Blues Away

James Dingwell, salesman for the Pawtucket division of the Blackstone Valley Gas & Electric Co., is reported to have sold approximately one Frigidaire each business day in April.

New Sales Supervisor for Frigidaire in Savannah

George E. Frick, formerly of Brunswick, Ga., is now sales supervisor for the Frigidaire Corp. in Savannah, Ga.

REQUESTS FOR INFORMATION

The following inquiries have been received by Electric Refrigeration News. Readers who can supply information on these subjects are invited to write at once, referring to the Query number.

Ward Service Manual Wanted

Query No. 100—A Chicago company says: "We have received several calls to service the Ward electric refrigerator. We are writing you to ascertain if you know where we could procure a service manual on this machine. We hesitate to service these machines without, at least, an instruction sheet."

Have You Heard of the Icerizer?

Query No. 101—A Brooklyn man writes: "I have been endeavoring to obtain some information regarding the refrigerator known as Icerizer and it was suggested to me that I communicate with you as you no doubt have a complete record of all refrigerators on the market.

"Will you please advise me if a refrigerator under such name is made and where? It might be possible that I may not have the proper name and if you know a make under a name similar to it, please send me the information.

"Have you any record of the Hoover-Icer? I believe that it is made in Chicago by the Hoover Refrigerator Co., and I can't seem to locate them."

Expresses Appreciation of the Request for Information Column

". . . We regret that we are able to give you no definite information regarding either of these inquiries. However, we would like to express our appreciation of the service which you are rendering the trade in attempting to answer various inquiries which come to you."—H. G. CHAMBERLIN, sales engineer, Flintlock Corp.

Why Refrigeration Manufacturers are adopting Balsam-Wool

WHAT the average woman actually expects from the refrigeration she buys is satisfactory food preservation with economy of operation.

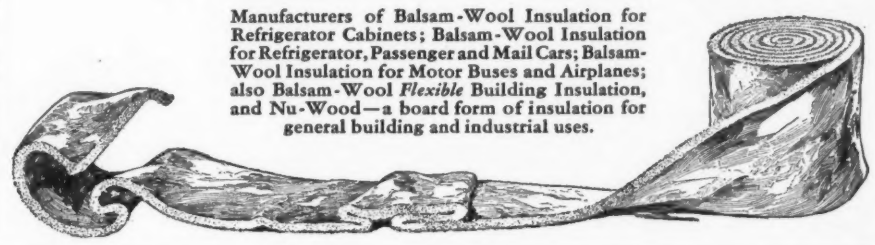
Therefore, what she really is looking for is *efficient refrigeration.*

Efficient refrigeration is possible only when a material of high insulating value is built into the box. That is why conscientious manufacturers are placing so much stress on insulation—why an increasing number are adopting BALSAM-WOOL as the *standard* material for this purpose.

Tests show that Balsam-Wool is highly resistant to the passage of heat and cold. It is durable, odorless and sanitary. Its flexibility makes it easy and economical to apply.

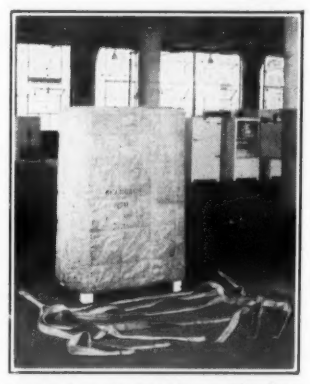
Write for samples and complete Balsam-Wool information.

WOOD CONVERSION COMPANY
Insulating Division of Weyerhaeuser Forest Products
Mills at Cloquet, Minnesota
Industrial Sales Offices:
360 N. Michigan Avenue, Chicago • 101 Park Avenue, New York



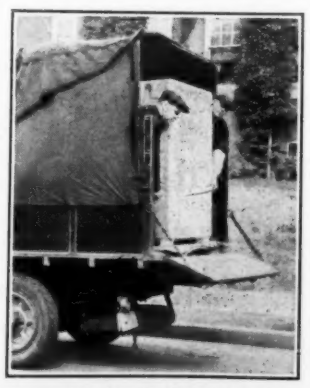
Manufacturers of Balsam-Wool Insulation for Refrigerator Cabinets; Balsam-Wool Insulation for Refrigerator, Passenger and Mail Cars; Balsam-Wool Insulation for Motor Buses and Airplanes; also Balsam-Wool *Flexible* Building Insulation, and Nu-Wood—a board form of insulation for general building and industrial uses.

A Soft, Canvas JACKET and SLING *for your* Refrigerator..



Ready for the harness, with the soft, padded jacket in place.

The heavy 3-ply belting slings are reinforced with harness leather and fastened with a buckle.



Easy to handle. Makes a *clean* delivery. The Slingabout goes back with you for the next load.

This soft, stout, canvas jacket lined with soft flannel is called the Webb Slingabout. Every manufacturer, every central station, every distributor or dealer who *delivers refrigerators* can use them to advantage.

This rugged, heavily padded Slingabout with its soft flannel lining makes an ideal protection for the new lacquer or paint of the cabinet, eliminating the danger of scratches and the need of re-finishing.

The heavy slings make ideal handles. Men can get a good "hold" and loads seem lighter.

Slingabouts save money by eliminating wooden crates on truck shipments. It takes only two minutes by the clock to secure a Webb Slingabout in place, and fasten it with the heavy 3-ply belting slings, reinforced with harness leather, sewed and riveted and finished with a tongue buckle that cannot slip.

A refrigerator in a Webb Slingabout is delivered in style befitting its worth. No dirt or dust is left to annoy the housewife — thoughtfulness which builds goodwill.

Slingabouts are made in all sizes. One size will usually accommodate two or three models. A dealer may need no more than one Slingabout for each group of refrigerator sizes. Manufacturers govern requirements according to the amount of shipping done by truck.

Write or use coupon for full information.

WEBB *Slingabout*

CHARLES J. WEBB & CO.
116 Chestnut Street, Philadelphia

CHARLES J. WEBB & CO., 116 Chestnut St., Philadelphia

Please send me full information about the Webb Slingabout. The make of refrigerator for which I might use them is .....

Name ..... *Address* .....